

ELEVENTH  
ANNUAL GENERAL REPORT  
OF THE DEPARTMENT,  
1910-11.

---

Presented to both Houses of Parliament by Command of His Majesty.

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DUBLIN CASTLE,

*27th February, 1912.*

SIR,

I have to acknowledge the receipt of your letter of the 24th instant, forwarding, for submission to His Excellency the Lord Lieutenant, the Eleventh Annual General Report of the Department of Agriculture and Technical Instruction for the Year 1910-11.

I am,

Sir,

Your obedient Servant,

J. B. DOUGHERTY.

THE SECRETARY,

Department of Agriculture  
and Technical Instruction,  
Dublin.



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# ELEVENTH ANNUAL GENERAL REPORT

OF THE

Department of Agriculture and Technical Instruction  
for Ireland.

---

TO HIS EXCELLENCY

JOHN CAMPBELL, EARL OF ABERDEEN,  
&c., &c., &c.,

LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR  
OF IRELAND.

---

MAY IT PLEASE YOUR EXCELLENCY,

I have the honour, on behalf of the Department of Agriculture and Technical Instruction for Ireland, to submit their Eleventh Annual General Report.

The Annual Report of the Department includes operations up to the close of the agricultural year, as it has been found more convenient to adopt this arrangement than to limit the Report to the period of the financial year.

The Report has been divided as follows:—

**Part I.—ADMINISTRATION AND FUNDS.**

1. Council of Agriculture and Boards.
2. Funds of the Department.
3. Administration of the Endowment Fund.
4. Central Institutions.
5. Miscellaneous.

**Part II.—DETAILS OF THE DEPARTMENT'S OPERATIONS.**

1. Agriculture.
2. Technical Instruction.
3. Fisheries.
4. Statistics and Intelligence.
5. Veterinary.
6. Transit.

## PART I.—ADMINISTRATION AND FUNDS.

### I.—COUNCIL OF AGRICULTURE AND BOARDS.

In the year 1911 there were two meetings of the Council of Agriculture—one on the 30th May and the other on the 16th November. Both meetings were held in the Lecture Theatre of the Royal Dublin Society, Leinster House, Dublin, by kind permission of the Council of the Society.

At the meeting in May, the more important subjects discussed were the following :—The National Insurance Bill in so far as it affected agricultural interests ; the question of milk production ; the importance of the poultry industry, especially for the occupiers of new holdings created under the Land Acts ; the working of the Weeds and Agricultural Seeds (Ireland) Act, 1909 ; the extirpation of warbles in cattle ; the export of calves and of in-calf cows ; the encouragement of flax growing ; the transit of live stock ; the Meat Marking (Ireland) Bill ; precautions against the introduction into Ireland of a disease in bees which had appeared in Great Britain ; agricultural credit with special reference to congested districts ; and the need for improved harbour accommodation in County Wexford.

At the November meeting the Department submitted for consideration an application made by the Irish Agricultural Organisation Society for a grant from the Development Fund for purposes of agricultural organisation. The application had been made to the Treasury for submission to the Development Commissioners appointed under the Development and Road Improvement Funds Act, 1909. The Treasury, in accordance with the statutory requirement, had forwarded the application to the Department for their report. In the course of the discussion at the meeting of the Council a resolution was proposed by the Reverend T. A. Finlay, M.A., and seconded by Mr. H. A. M. Barbour, M.A., to the effect that such funds as might be allocated by the Development Commissioners in aid of co-operative organisation of agriculture in Ireland should be applied through the Irish Agricultural Organisation Society, subject to such conditions as the Commissioners might deem necessary to ensure that the funds so granted should be applied to the organisation of agricultural industry only. An amendment was proposed by Mr. P. A. Meehan, M.P., and seconded by Mr. T. P. McKenna, recommending that any money available for agricultural co-operation should be given to the Department and administered by them. After a full debate a division was taken, and the amendment was adopted by 47 votes to 33.

A summary of the proceedings of each meeting of the Council

together with the Vice-President's Address, was published in the Department's *Journal*.\*

The Council of Agriculture consists of 104 members, of whom 68 are appointed by the County Councils and 34 are nominated by the Department, the President and Vice-President of the Department being *ex-officio* members. Under Section 27 of the Agriculture and Technical Instruction (Ireland) Act, 1899, the members of the Council of Agriculture hold office for terms of three years. The term of office of the existing Council will expire on 31st March, 1912. The new Council will be constituted as soon as practicable after that date.

THE AGRICULTURAL BOARD. The Agricultural Board in the year 1910-11 consisted of the following members:—

Name and Address	By whom appointed
Daly, Very Rev. Canon, D.D., P.P., Lavagh, Co. Sligo,	Connacht Provincial Committee.
Downes, Robert, J.P., Russelstown, Mullingar,	Leinster Provincial Committee.
Everard, Colonel Sir Nugent T., Bart., H.M.L., Randlestown, Navan, Co. Meath,	The Department.
Gore-Booth, Sir Josslyn, Bart., D.L., Lissadell, Sligo,	The Department.
Healy, His Grace the Most Rev. John, D.D., Lord Archbishop of Tuam, St. Jarlath's, Tuam, Co. Galway,	Connacht Provincial Committee.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross, Bishop's House, Skibbereen, Co. Cork,	Munster Provincial Committee.
M'Cance, John S. F., J.P., Woodbourne, Dunmurry, Co. Antrim,	Ulster Provincial Committee.
M'Donald, William, J.P., Laharan, Minane Bridge, Carrigaline, Co. Cork,	Munster Provincial Committee.
Monteagle, The Right Hon. Lord, K.P., D.L., Mount Trenchard, Foynes, Co. Limerick,	The Department.
Montgomery, H. de F., D.L., Blessingbourne, Fivemiletown, Co. Tyrone,	Ulster Provincial Committee.
Murnaghan, George, J.P., Lisanelly House, Omagh, Co. Tyrone,	The Department.
O'Neill, Patrick J., J.P., Kinsealy House, Malahide, Co. Dublin,	Leinster Provincial Committee.

The Agricultural Board meet at the Offices of the Department, Upper Merrion Street, Dublin. The funds controlled by the Agricultural Board are set forth on page 8. The schemes and operations of the Department that are explained in detail in the section of this report which deals with Agriculture have all been undertaken with the advice and concurrence of the Board.

\* See *Journal*, Vol. XI., No. 4; Vol. XII., No. 2.

THE BOARD OF TECHNICAL INSTRUCTION. The Board of Technical Instruction in the year 1910-11 consisted of the following members:—

Name and Address	By whom appointed
Barbour, Frank, Annebrook, Mullingar, Co. Westmeath,	Ulster Provincial Committee.
Clancy, Most Rev. John, D.D., Lord Bishop of Elphin, St. Mary's, Sligo,	Connacht Provincial Committee.
Crozier, James, J.P., V.S., 26 Montpelier Hill, Dublin,	Dublin County Borough Council.
Dickson, Alexander, 15 Parliament Street, Dublin,	Dublin County Borough Council.
Donnellan, Thomas, Thomond Gate, Limerick,	Limerick County Borough Council.
Dunn, Christopher J., J.P., 1 Mount Verdon Terrace, Wellington Road, Cork,	The Department.
Evans, Rev. Henry, D.D., M.R.I.A., F.I.H., St. Helen's, Blackrock, Co. Dublin,	Commissioners of National Education.
Finlay, Rev. T. A., M.A., 35 Lower Leeson Street, Dublin,	Leinster Provincial Committee.
Glynn, Joseph A., B.A., Beech House, Tuam, Co. Galway,	The Department.
Good, John, The Moorings, Merrion Road, Dublin,	Joint Committee of Councils of the Co. Dublin Urban Districts.
Henderson, Sir James, A.M., D.L., Oakley House, Windsor Park, Belfast,	The Department.
Johnston, Sir John Barr, J.P., Londonderry,	Londonderry County Borough Council.
Macartney, William, J.P., 33 Cliftonville Road, Belfast,	Belfast County Borough Council.
McClelland, John A., M.A., D.Sc., F.R.S., Rostrevor, Orwell Road, Rathgar, Co. Dublin,	The Department.
Mercier, Alderman Samuel T., J.P., 2 Mount Clifton, Cliftonville Road, Belfast,	Belfast County Borough Council.
O'Ceallaigh, Seaghan T., 8 Belvedere Avenue, Dublin,	Dublin County Borough Council.
Power, Thomas, Dungarvan, Co. Waterford,	Munster Provincial Committee.
Sheehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore, Bishop's House, John's Hill, Waterford,	Waterford County Borough Council.
Sisk, Richard, Evergreen Villas, Cork,	Cork County Borough Council.
Starkie, William J. M., M.A., Litt.D., Tyrone House, Marlborough Street, Dublin,	Intermediate Education Board.
Taylor, Alexander, 131, Donegall Street, Belfast,	Belfast County Borough Council.

The funds administered with the concurrence of the Board of Technical Instruction are dealt with on page 9.



The Consultative Committee for co-ordinating educational administration; as constituted by Section 23 of the Act of 1899, consists of the Vice-President of the Department as Chairman, and one person appointed by each of the following bodies:—The Commissioners of National Education, the Intermediate Education Board; the Agricultural Board, and the Board of Technical Instruction.

The Committee in 1910-11 consisted of the following members:—

Name and Address	By whom appointed
The Right Hon. T.W. Russell, P.C., M.P., Vice-President of the Department, Department of Agriculture and Technical Instruction, Dublin,	Ex-officio.
William J. M. Starkie, M.A., Litt.D., Tyrone House, Marlborough Street, Dublin,	Commissioners of National Education.
Rev. T. A. Finlay, M.A., 35 Lower Leeson Street, Dublin,	Intermediate Education Board.
John A. McClelland, M.A., D.Sc., F.R.S., Rostrevor, Orwell Road, Rathgar, Co. Dublin,	Board of Technical Instruction.
T. P. Gill, Department of Agriculture and Technical Instruction, Dublin,	Agricultural Board.

## 2.—FUNDS OF THE DEPARTMENT.

### (a.) *Parliamentary Vote.*

In the Parliamentary Vote for the Department for 1910-11 provision was made for the salaries and other expenses in connection with the institutions and officers transferred from other Departments under Section 2 of the Agriculture and Technical Instruction (Ireland) Act of 1899, as well as for the salaries and expenses of officers appointed since 1st April, 1900. The Vote also contained the following Grants-in-Aid:—Cattle Pleuro-Pneumonia Account, including the grant for swine fever and rabies work, £10,200; Congested Districts Board, £169,750; provision for agricultural purposes under Section 15 of the Act of 1899 and Section 49 of the Irish Land Act, 1909, £37,000 (this sum forms part of the Endowment Fund); provision for the purchase of specimens for the National Museum of Science and Art, £2,300; books for the National Library of Ireland, £1,300; and apparatus and equipment for the Royal College of Science, £10,600. Provision was also made for tobacco growing experiments, £6,000;

for forestry operations, £6,000; and for the improvement of horse-breeding a special grant from the Development Fund of £4,600.

The Parliamentary Vote also contained the grants for Science and Art Instruction in Ireland, payable to schools which adopt the Department's programme for Experimental Science, Drawing, Manual Instruction, and Domestic Economy. The provision made for these purposes was £53,250, an increase of £4,500 on the corresponding provision for the previous year.

The expenditure in respect of the institutions maintained from the Parliamentary Vote during the year 1910-11 was as follows :—

Royal College of Science, . . . .	£16,583
National Museum of Science and Art, . . . .	13,498
National Library of Ireland, . . . .	5,640
Metropolitan School of Art, . . . .	4,621
Royal Botanic Gardens. . . . .	4,844
	<hr/>
	£45,186

The Geological Survey of Ireland was transferred in April, 1905, from the Board of Education, England, to the Department. The expenditure on the survey in 1910-11 was £2,306.

#### (b.) *Endowment Fund.*

During the year ended 31st March, 1911, the whole of the Department's Annual Endowment Fund provided under the Agriculture and Technical Instruction (Ireland) Act, 1899, viz., £166,000, was duly received, together with a further annual sum of £5,000 under the terms of the Agriculture and Technical Instruction (Ireland) Act, No. 2, 1902. The latter sum was formerly payable to the Royal Dublin Society, under the Probate Duties (Scotland and Ireland) Act, 1888, for the improvement of the breeds of horses and cattle. There was also received a contribution of £7,000 from the Ireland Development Grant, earmarked for the purposes of Technical Instruction, and £19,000 under Section 49 of the Irish Land Act, 1909, in respect of the agricultural work of the Department in the Congested Districts. The amount received as interest arising out of securities held by the Department, and from moneys on deposit in the Bank of Ireland, was £8,572, and the interest received from loans for bulls, stallions, agricultural banks, etc., was £708.

#### (c.) *The General Cattle Diseases Fund.*

The General Cattle Diseases Fund was formed under the Contagious Diseases (Animals) Act of 1878 by assessment on the several Poor Law Unions in Ireland, mainly for the purpose of recouping to local authorities one-half of the expenditure in-

curred by them under the Diseases of Animals Acts, and by that means lessening the burden which might otherwise press unduly on particular localities, owing to the prevalence therein of contagious diseases of animals. It is also drawn upon to supplement the annual Grant-in-Aid of the Cattle Pleuro-Pneumonia Account in any year in which that grant proves insufficient to meet the expenditure of the central authority in dealing with pleuro-pneumonia, foot and mouth disease, rabies, and swine fever.

The Fund is replenished by assessments on the several counties and county boroughs in proportion to the net annual value of property therein. The total amount which may be levied on the several contributing bodies for the purposes of the Fund is limited by the Diseases of Animals Act of 1894 to a sum which, taken with any money carried to the Cattle Plague Account before the 30th September, 1878, is equivalent to a poundage of 8d. in the pound; and no larger sum may be levied at any one time than the equivalent of  $\frac{1}{2}$ d. in the pound. Since the inception of the Fund a sum equivalent to a poundage rate of  $6\frac{1}{2}$ d. in the pound has been levied in twenty-six assessments, the last of which was dated the sixth of December, 1910. An assessment at the rate of  $\frac{1}{2}$ d. in the pound now yields approximately £16,350, and this sum would cover the normal expenditure, exclusive of expenditure on swine fever work in excess of the Parliamentary Grant, for a period of about eighteen months.

A proportion of the fines recovered in prosecutions for offences under the Diseases of Animals Acts is also carried to the credit of the General Cattle Diseases Fund, and the amount thus realised covers certain miscellaneous expenses of the central authority, such as the expenses incurred in the examination of carcases washed ashore, etc., with which the Fund is also chargeable under Section 72 (4) of the Diseases of Animals Act of 1894.

### 3.—ADMINISTRATION OF THE ENDOWMENT FUND.

The Department's Endowment Fund at present consists of an annual income of £166,000 under the Agriculture and Technical Instruction (Ireland) Act of 1899, £5,000 under the Agriculture and Technical Instruction (Ireland) Act, No. 2, of 1902, £19,000 under Section 49 of the Irish Land Act of 1909, and £7,000 from the Ireland Development Grant. From the total, amounting to £197,000, a sum of £62,000 has to be set aside for the purposes of technical instruction, and £10,000 for sea fisheries. A provision of about £1,000 a year has also to be made for the payment of the superannuation allowances of certain persons formerly employed under the Commissioners of National Education, and for the travelling expenses of members of the Council of Agriculture, and of the two Boards established by the Act of 1899.

When the sums mentioned have been set aside for these purposes, the balance, amounting to £124,000, constitutes the annual sum applicable for "the purposes of agriculture and other rural industries, and sea fisheries." In addition to this annual income, certain capital sums, amounting in all to £204,906, were placed at the disposal of the Department under Section 15 (e) and (g) of the Act of 1899. These sums and the unexpended balances of the annual income of the Endowment Fund during the initial years of the Department's existence were invested in Government securities. The nominal or face value of the securities held on 31st March, 1911, including £20,000 Consols transferred from the Board of Works to the Department in April, 1904, in respect of the Sea and Coast Fisheries Loan Fund, was £276,446, and their cash value was £247,392. A sum of £10,440 was on deposit in the Bank of Ireland, and there was a balance of £35,162 in the Paymaster-General's Supply Account to credit of the Fund. The total assets of the Fund on 31st March, 1911, amounted to £292,994.

The liabilities in respect of sums specifically ear-marked under Section 16 of the Act of 1899 were as follows:—For technical instruction in the six county boroughs, £42,958; for technical instruction in urban and rural districts, £9,837; for extension of special schemes

of technical instruction, £14,712; for sea fisheries, £12,024; for the Sea and Coast Fisheries Loan Fund, £7,886; Steam Cruiser and Dredger Replacement Funds, £9,928; and for the buildings and equipment of the Munster Institute an unexpended balance of £1,557 out of £10,000 provided under the Act of 1899. The total amount of these liabilities was, therefore, £98,902 on 31st March, 1911.

Deducting the liabilities from the assets, there remained a sum of £194,092 available for the purposes of agriculture and other rural industries and sea and inland fisheries. The latter sum has been allocated, with the concurrence of the Agricultural Board, for various undertakings, such as the purchase of additional land in connection with the Agricultural Colleges and Stations of the Department, the building and equipment of agricultural schools, loans to agricultural credit societies, loans for the purchase of fencing materials, the purchase of bulls and stallions, the erection of village halls, flax scutching mills, etc.; agricultural work in conjunction with County Committees, marine works, and the protection and development of sea and inland fisheries.

The net expenditure on the agricultural side of the Department's work in 1910-11, including grants of £10,500 for the purpose of providing instruction in manual work and domestic economy in rural districts, and £1,000 for part insurance of motor

fishing boats, was £139,000. The details of the expenditure are shown in the Appendices, pages 194-5.

Under Section 16 (1) (c) of the Agriculture and Technical Instruction (Ireland) Act of 1899, the annual

FUNDS FOR TECHNICAL INSTRUCTION.	sum of £55,000, ear-marked for the purposes of technical instruction, is to be divided into two parts, one part of which is distributable, in proportion to their respective populations, among the county boroughs in aid of approved schemes of technical instruction, and the other part is applicable to schemes of technical instruction elsewhere than in county boroughs, and for certain other purposes mentioned in the Act, such as the collection of information for the purposes of technical instruction.
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The sum of £55,000 was allocated by the Department, with the concurrence of the Board of Technical Instruction, for the triennial period ending 31st March, 1912, as follows:—

For Technical Instruction in County Boroughs	£26,000.
For Technical Instruction elsewhere than in County Boroughs, and for central purposes	£29,000.

The Board, therefore, control the expenditure of an annual sum of £29,000, which is applicable for technical instruction elsewhere than in County Boroughs, and for certain central purposes. The balance of the £55,000, viz., £26,000, allocated, with the concurrence of the Board, for technical instruction in the six county boroughs, is applied in aid of schemes in these boroughs subject to the approval of the Department alone. Out of the sum of £29,000 referred to, the Department, with the concurrence of the Board, set aside an annual sum of £4,000 for central purposes, e.g., for Senior Scholarship schemes, provision for training teachers, etc. The remaining £25,000 is distributed in aid of approved schemes of technical instruction in urban and county districts. Details of these schemes will be found in Part II. of the present Report, under the head of "Technical Instruction."

The Agricultural Board allocate each year a sum of £10,500 out of the funds administered with the concurrence of that Board, for Manual Instruction and Domestic Economy Classes in rural districts. Such classes are regarded as part of the general scheme of agricultural education, but, for administrative reasons, the Department have hitherto found it convenient to administer this sum with the concurrence of the Board of Technical Instruction. Classes in lace, crochet, and shirt making, and other rural industries, are also financed from the moneys controlled by the Agricultural Board, the amount voted in 1910-11 for these special purposes being £3,000.

The grant in aid of technical instruction for 1910-11, commonly known as the "Equivalent Grant," was duly received from the Ireland Development Grant, and amounted to £7,000.

The total of the sums available from the Endowment Fund in 1910-11 for technical instruction in non-agricultural subjects was £73,201,\* exclusive of the balance of £54,964 brought forward from the year 1909-10. The expenditure was £61,100, of which £15,943 was paid to the county boroughs. The amount of the balance carried forward to the year 1911-12 was £67,065, and comprised £42,958, accrued in respect of technical instruction schemes in county boroughs, and £24,549 ear-marked, as stated above, for schemes in urban districts and the extension of special schemes, such as the establishment of trade preparatory schools, special courses of instruction for masters and foremen in trades, and summer courses for teachers of elementary science, drawing, manual instruction, and domestic economy.

Under Section 16 (d) of the Act a provision of £10,000 is to be made each year for the purposes of sea fisheries. This sum was supplemented in 1910-11 by a grant of £1,000 from the funds controlled by the Agricultural Board for the part insurance of motor fishing boats purchased on loan from the Sea and Coast Fisheries Loan Fund.

The total sum available for these purposes in 1910-11, including the balance carried forward from 1909-10 and sundry receipts, was £25,994. The gross expenditure was £13,970, of which £3,062 was spent on marine works and dredging carried out at Arklow, Ballaghaline, Courtown, Fenit, and Kilmore. Further information regarding these and other marine works, the patrol of the fishing grounds, and the investigations carried on at the marine laboratory and oyster beds at Ardfry, the cost of which is defrayed from this fund, is given in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

The portion of the Sea and Coast Fisheries Fund reserved by the Purchase of Land (Ireland) Act, 1891, for expenditure elsewhere than in congested districts counties, which remained vested in the Commissioners of Public Works, was transferred to the Department under an Order in Council dated 24th March, 1904, in accordance with the terms of Section 15 (c) of the Agriculture and Technical Instruction (Ireland) Act, 1899.

The Sea and Coast Fisheries Fund was the residue of a sum collected by public subscription for the relief of distress in Ireland in the year 1822. This sum was vested in trustees known as the "Trustees to Aid Sea and Coast Fisheries of Ireland." By the Act 47 and 48 Vic., c. 21, the fund was transferred to the Commissioners of Public Works, who were authorised to make fishery loans therefrom to such persons, and upon such security,

\* This amount does not include the provision of £53,250 made in the Parliamentary Vote, as stated on page 6, for grants to schools and classes of science and art and technical instruction. The distribution of these grants is shown on pages 350-383.

as the Inspectors of Irish Fisheries should recommend. By the Purchase of Land (Ireland) Act, 1891 (54 and 55 Vic., c. 48), the fund was transferred to the Congested Districts Board, save £20,000, which was reserved for the purpose of loans in non-congested districts under the same terms as obtained before the passing of that Act.

By the Agriculture and Technical Instruction (Ireland) Act, 1899, this sum of £20,000—or what it was then represented by in cash, investments and outstanding loans—was placed at the disposal of the Department. It was not, however, actually transferred until 1st April, 1904, when the Department received from the Commissioners of Public Works £1,521 19s. 6d. in cash, £20,000 in Consols, and promissory notes to the amount of £7,700, inclusive of arrears and irrecoverable balances.

During the year ended 31st March, 1911, one hundred and sixteen applications for new loans were favourably considered by the Department, and a sum of £10,323 was issued for the purchase and repair of fishing boats and gear. The manner in which these loans are repaid continues to be satisfactory. The details of the transactions are published in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

#### 4.—CENTRAL INSTITUTIONS.

The forty-third Annual Report of the Dean and Council of the Royal College of Science will be found in the ROYAL COLLEGE OF SCIENCE APPENDICES, page 414. The Session 1910-11 was the last Session in which the work of the College was conducted in the building in Stephen's Green.

The number of students attending the College during the Session was 121, of whom 96 were Associate Students and 20 were non-Associate Students. These included 4 Royal Scholars, 15 Science Scholars, 33 Agricultural Scholars (including 1 in Horticulture and 2 in Forestry) and 13 Teachers-in-training. In addition there were 2 Local Exhibitioners, 1 Special Research Student and 3 Post-Graduate Students, to whom Research Studentships had been awarded. At the end of the Session 25 students were awarded the Associate Diploma of the College—9 in the Faculty of Agriculture, 3 in the Faculty of Engineering, 5 in the Faculty of Applied Chemistry, and 8 in courses for Teachers-in-training, viz.:—5 in Chemistry Section, 1 in Physics Section and 2 in the Natural Science Section.

The College has again been utilised as the chief centre for the short Summer Courses of instruction which the Department organise each year mainly for the further training of teachers working under their Programme of Experimental Science, Drawing and Manual Instruction for Day Secondary Schools.

In 1911, these Summer Courses were held at 20 centres, with an attendance of 548. Of this number, 220 attended at the Royal College of Science. Of these 40 attended the new course in Physical Geography instituted in connection with the revised programme in Geography under the Intermediate Education Board. This course was given under the direction of Professor Herberton, of Oxford, and Professor Cole, of the Royal College of Science. The other courses were, as in former years, given by members of the staff in association with extern teachers.

The increase in the number of research students attending the College was mainly due to the scheme of studentships for the encouragement of research instituted by the Department which came into operation in the beginning of the session. These studentships carry with them the privilege of the free use of the laboratories and facilities of the College and are limited in number to one-tenth of the number of Associate students attending the College. They are open to all-students who have completed their Associateship course.

The Department regret to record the retirement, on the 31st August, 1911, under the Civil Service regulation as to age, of Professor Sir Walter Noel Hartley, F.R.S., Dean of the Faculty, who held the Chair of Chemistry in the Royal College of Science since 1879. The honour of knighthood was conferred on Sir Walter Hartley on the occasion of the opening of the new College of Science by His Majesty the King. The vacancy caused by Sir Walter Hartley's retirement has been filled by the appointment of Mr. Gilbert T. Morgan, D.Sc., F.I.C., Assistant Professor of Chemistry in the Imperial College of Science and Technology, London, and Honorary Secretary to the Chemical Society.

The new buildings of the Royal College of Science, of which the foundation stone was laid by His late Majesty King Edward VII. on 28th April, 1904, were opened by His Majesty King George V. on the 8th July, 1911. The buildings were erected under the direction of the Commissioners of Public Works.

The removal of the apparatus and general equipment of the College to the new building in Merrion Street was carried out during the months of August and September, under the superintendence of special members of the College Staff delegated for that purpose. The re-arrangement and re-erection of the apparatus and general equipment of the laboratories engaged the attention of the staff during the month of September, in preparation for the opening of the session on October 2nd, 1911.

The following description of the buildings of the new College is taken from the Department's *Journal* for October, 1911 :—

"The new College of Science is situated in Upper Merrion Street, where it forms part of a scheme which will make a notable addition to the public buildings of Dublin. It occupies the western and part of the northern and southern sides of a quadrangle of which the remaining sides will be enclosed by the buildings of the Department of Agriculture and Technical Instruction and other Government offices. The principal entrance to the quadrangle will be from Merrion Street, and will afford a view from the street of the portico and central dome of the new College. The architectural aim in the



treatment of the various *façades* is to continue the tradition of the public buildings for which Dublin is famous, such as the Custom House, the Old Parliament House, Trinity College, the Four Courts, King's Inns, and others. These, erected mostly in the eighteenth century—Dublin's best period, when the tradition to which architecture seems again tending to return, was yet unbroken—are notable examples of the classic renaissance treated with certain features of local rather than Italian style. Such is the idea that the eminent designer—Sir Aston Webb—set before him in planning the Royal College of Science, and all who have seen the new building are struck with the dignity and beauty with which he has given effect to his aim.

"The main building of the College is about 360 feet in length and each of the projecting wings measures 160 feet long. The buildings are bounded on the south by Merrion Place, while on the north side a new road is to be constructed between the College of Science and the Natural History Museum. Two ornamental arches through the north and south wings of the College will form side entrances to the quadrangle.

"Over the principal entrance, which is situated in the centre of the main building, a triangular pediment is supported by a portico with Ionic columns. In the middle of the pediment is a beautifully carved figure of a man in meditative attitude, representing the allegorical figure of Study. The figure is the work of Mr. Oliver Sheppard, R.H.A. The portico is surmounted by a dome rising to a height of 116 feet and crowned by a lantern composed of a colonnade of miniature Ionic pillars. Under the dome is a large clock, the four faces of which can be seen from distant parts of the city. The walls are built of chiselled granite from the Ballyknocken Quarries, County Dublin, ornamented with dressings around the windows, doorways, and cornices, of carved Portland stone. An open balustrade of Portland stone forms a parapet around the whole roof.

The north and south entrances are ornamented with pediments similar to the portico of the main entrance. Over the arches are carved the royal arms and monograms of the late King and King George.

"The main portico is approached by a shallow flight of steps and leads into a handsome arched vestibule. Two spacious staircases made of stone lead to the first floor. There are four storeys, on which are disposed numerous laboratories and lecture rooms connected by broad corridors running right through from end to end. Immediately behind the entrance hall is a large lecture theatre, 70 feet in length by 35 in breadth, while to the south side a chemical laboratory extends through two storeys of the building in height. Underneath the dome are situated the students' common-room and smoking-room. As well as being reached by the main staircase the corridors are connected with staircases at the ends of both wings. All the corridors are paved with marble squares. Although many of the rooms are fitted with fireplaces the heating will be done chiefly by means of hot water pipes, which are laid on to every room and corridor in the building.

"The fitting-up of the various laboratories is of an elaborate character, and includes all the most up-to-date apparatus for scientific experiments. Electricity will be chiefly used for light and power. The various rooms will always be kept well ventilated by means of a carefully devised system of fans.

"At the rear of the new College an additional block of buildings has been erected as a Mechanical Engineering Laboratory.

"The Architects are Sir Aston Webb, R.A., of London, who was the architect of the Royal College of Science, London, and the Queen Victoria Memorial, and Sir Thomas Manly Deane of Dublin, who, in partnership with his father, the late Sir Thomas Deane, was the architect of the Science and Art Museum and National Library. The building and equipment work was carried out by Messrs. M'Laughlin & Harvey, of Dublin and Belfast."

The question of co-ordinating the technological work of the Royal College of Science with that of the National University,

to which reference was made in the last Report, is still under consideration, and the Senate of the University have appointed a Committee in connection with the matter. A scheme of co-ordination between the Queen's University of Belfast and the Royal College of Science has already been arranged.

The course for the Associateship of the Royal College of Science has, up to the present, been of three years' duration. The Department have always felt the necessity for a fuller and broader curriculum than could be comprised within three years; but owing to the urgency of providing a supply of trained teachers for their work throughout the country, they were hitherto unable to take any steps to extend the course. Now that the more urgent needs of their schemes have been met, and as the pressure has accordingly become less, they propose that in future the course for Associateship shall extend over a period of four years. A detailed time table to suit such an extension is being prepared. During the current Session the First and Second Year students in the Faculty of Agriculture have elected to take the Four Years' course. In arranging it the Department have followed along the main lines of the four years' course which was submitted by them to the Dublin and Belfast University Commissions in response to their invitation as to the views of the Department on the question of co-ordination of the Royal College of Science for Ireland in its technological work with the new Universities.

The powers subsequently conferred on the Queen's University enabling the Senate to draw up regulations for co-ordination with other institutions have been utilised in drawing up a course of study for students in Agriculture. The regulations of the University provide that a student of the University who wishes to obtain a degree in Agriculture may complete a two years' course of University study in General Science and Literature at the Queen's University, Belfast, and a further two years' course in technical subjects in the Royal College of Science, Dublin.

The new curriculum will permit of similar arrangements being made with any of the Universities in Ireland, as the initial two years of the curriculum is similar in character to the general scientific course pursued during the first two years of University study, while the third and fourth years are devoted more especially to the technical aspects of the Sciences.

The Irish Antiquities Collection has been increased by the addition of 199 new objects, 197 of which were deposited by the Royal Irish Academy, One object was obtained by purchase, and one by gift. Among the most important objects added were the fine gold lunula discovered at Lisanover, Co. Cavan, an interesting example of an early stone lamp, and a fine bronze blade and ferrule found in Lough Ruddh bog near Tullamore. The arrangement of the west

NATIONAL MUSEUM  
OF  
SCIENCE AND ART.

crypt has been proceeded with, and at the conclusion of the year it was in a forward condition, and will probably be opened to the public in the course of the summer. The fitting-up of the south-west crypt has also been taken in hand to accommodate the valuable collection of the Royal Society of Antiquaries, which has been placed on loan in the Museum.

The Keeper of the Irish Antiquities Section, Mr. George Coffey, whose *Guide to the Celtic Antiquities of the Christian Period preserved in the National Museum* was issued in 1909, published this year a Monograph on *New Grange (Brugh na Boinne) and Other Incised Tumuli in Ireland*. Both works have won wide approval.

In the Art and Industrial Division a very fine collection of pottery figures has been placed on loan by Mr. Frank Falkner, and the silver collection has been enriched by the purchase of two very early spoons, an Irish chalice, dated 1683, and other pieces of early Irish make. About 15 valuable pieces of old lace have also been added to the collection.

The Ethnographical Collection has been increased by a valuable collection presented by Dr. Charles E. Gardner, and by an interesting collection of Mexican antiquities lent by W. J. Campbell, Esq.

Four illustrated chapters of the General Guide have been published during the year, and a Catalogue of the Falkner Collection. These illustrated Guides are appreciated by the public, and are calculated to increase the interest and usefulness of the collections.

In the Circulation Division 8 new cases and frames of objects were prepared. There are now 326 cases and frames available for issue to schools. There were 472 issues during the year.

In the Natural History Division, Zoological Section, the re-arrangement of the Lower Room has been continued, and it is hoped that it will be finished during the coming year. A small room, containing a collection of specimens that can be handled, set apart for University and other students, was opened on the 19th May, 1910, and between that date and 31st March last it was made use of by 678 students. The staff, in addition to their ordinary duties, were engaged during the year in completing reports for the Fisheries Branch, and in identifying and working out specimens collected at Clare Island.

In the Botanical Section the re-arrangement of the collection of Fossil Plants has been commenced, and has already revealed several valuable additions to the knowledge of the Irish Fossil Flora. The Index Collection and the specimens illustrative of plant diseases are much used by students. Owing to the extension of the collections the space available is now found too limited for their proper display.

Owing to the re-arrangement of the Zoological and Fossil Collections, more room has been made available for the general collection of Minerals, which is now displayed to great advantage. Special small collections have also been set apart for the

use of students in the Natural History Students' Room, as referred to above.

The Department regret the retirement on 30th September, 1911, from the service of the Museum of Mr. H. Bantry White, I.S.O., M.A., M.E., under the Civil Service regulation as age. Mr. White served for the long period of forty-seven years, having been first appointed as Treasurer's Clerk in 1864. Since 1882 Mr. White was Chief Clerk and Second Officer of the Museum and other Science and Art Institutions.

The attendance of readers at the National Library of Ireland during the year has been 208,501, being an NATIONAL LIBRARY increase of 19,235 over that of last year.

OF IRELAND. The working year 1910-11 was, however, five days longer than the year 1909-10.

The number of volumes added to the Library and made accessible to readers during the year was 5,142. The Author and Title Catalogue for the year 1908 has been printed off and issued during the year, and that for 1909 is being prepared. The printing of the Decennial Subject Index, 1894-1903, is in course of preparation, and the Septennial Index, 1904-1910, is in progress. Many important donations have been received, notably that from Lord Crawford — *Bibliotheca Lindesiana*—a privately printed Catalogue of the Library at Haigh Hall, and also the Catalogue of Tudor and Stuart Proclamations.

The prolonged drought during the summer months of the year 1911 caused some anxiety to those in charge

ROYAL BOTANIC of the Royal Botanic Gardens at Glasnevin.  
GARDENS.

There was no rain for a period of thirty days ending 15th June. This was followed by a further very dry period to 29th July, and again in September the rainfall was abnormally small. The water supply pumped from the river Tolka by the hydraulic ram fortunately did not fail, and proved of the greatest value. Eight men were employed watering out of doors daily from 4 p.m. to closing time, and only a few trees and shrubs died. It is satisfactory to report that the plants did not suffer much, and the year was, generally speaking, a good one for plant life.

Several important operations were carried out in the gardens during the year, and considerable improvements were made in the grounds and walks. Owing to the shallow nature of the soil several groups of plants in the systematic classes were not doing well. The plants in ten of these beds were all lifted, the subsoil removed for several inches, and good soil put in to replace it. The plants have already benefited by this change. All the stock in the nursery gardens were lifted, duplicates were sorted out, and the remainder replanted. Trees and shrubs which were fully established were moved to permanent quarters in the grounds. The last section of the old rock work was taken down and rebuilt. The bog garden at the pond was enlarged. Some further additions have to be made to this branch. Sections of

the herbaceous borders were re-made. Plants where overcrowded were removed, and old clumps which were failing were lifted, divided, and manured.

Considerable progress was made by the Metropolitan School of Art during the Session 1910-11. The number of students in attendance was 426 as compared with 391 during the previous session. In the National Competition of

Schools of Art and Art Classes the Metropolitan School of Art was conspicuously successful, two of the ten Gold Medals awarded being gained by students of the School. Although the total number of awards was two less than in the previous year, much better results were obtained generally, two Gold and three Silver Medals being obtained in place of only one Silver Medal in 1910. The results obtained in the present year's competition constitutes a record for the School.

The School was entrusted with the designing and illuminating of the Address to Her Majesty the Queen from the Women of Ireland, on the occasion of the Royal Visit in July last, and the work of the School in this connection has been highly appreciated by Their Majesties for its design and beauty of workmanship.

During the year 1910-11 the Geological Survey of Ireland continued the work of mapping certain areas

GEOLOGICAL  
SURVEY  
OF IRELAND.

in north-west Ireland on the six-inch scale, these having been previously represented only by one-inch sheets. The superficial deposits of Clare Island were investigated

and mapped, and mechanical analyses of the soils were prepared. During the winter a scheme was drawn up for colouring the future maps of the Survey in accordance with a series of colour-printed tablets arranged by the Ordnance Survey. The Dublin sheet of the new map on the scale of one-inch to four miles was prepared for the engraver.

Particulars regarding the year's work in the Royal College of Science, the National Museum of Science and Art, the National Library, the Metropolitan School of Art, the Royal Botanic Gardens, and the Geological Survey of Ireland are given in the Appendices. The Report of the Board of Visitors of the National Museum and the Royal Botanic Gardens is printed at page 489, and the Report of the Council of Trustees of the National Library at page 503.

## 5 — MISCELLANEOUS.

It was stated in the last Report that the Department had made application to the Development Commis-

THE DEVELOPMENT  
FUND. sioners appointed under the Development and Road Improvement Funds Act, 1909, for advances from the Development Fund for (1) Forestry, (2) Fisheries, (3) Scientific Research for the pur-

poses of Agriculture, and (4) Horse-breeding. These applications have since been fully considered by the Development Commissioners. Representatives of the Department have on several occasions attended meetings of the Commissioners and have given evidence in regard to the details of the recommendations submitted. The Department are glad to be able to report that grants for each of these four purposes have been recommended by the Commissioners and have been sanctioned by the Treasury.

*Forestry.*—Under this head an advance of £25,000 for the purchase of certain areas for forestry, comprising in all 10,700 acres, has been sanctioned. The amount available for expenditure during the financial year 1911-12 is £17,000. Negotiations for the purchase of the areas in question are proceeding.

*Fisheries.*—A sum of £4,250 has been sanctioned for the purchase of a dredger and barges. The need for this dredger for use in various harbours has been felt for some time. A suitable dredger, with barges, has been acquired and is now at work.

The Department have also submitted an application for a large grant for the construction and improvement of fishery piers and harbours. This matter is at present under consideration, and the Department have reason to hope that a substantial grant will be made available.

*Agricultural Research.*—As regards agricultural research, a grant of £3,500 for the financial year 1911-12 has been allocated for general investigation and technical assistance, and the Development Commissioners have intimated that they will be prepared, if satisfactory evidence is produced as to the working of the scheme and if the state of the Development Fund warrants it, to recommend for future years a grant not exceeding £5,000 per annum. The Department's scheme of agricultural research to which this money will be applied, provides for four sections, viz. : (1) control of agricultural seeds and plant diseases ; (2) provision of pure cultures of the best varieties of cereals ; (3) chemical advisory work ; and (4) technical advice and assistance in connection with cattle diseases other than those scheduled under the Diseases of Animals Acts and dealt with by the Department's Veterinary Branch.

*Horse-breeding.*—The amount allocated from the Development Fund for the encouragement of horse-breeding is £10,000 for the financial year 1911-12. At the end of the year the Commissioners will be prepared to consider the renewal of the grant, and the Department have asked for its renewal. Of this sum of £10,000, the Department have allocated a sum of £4,000 for increasing the number of approved stallions, a further sum of £4,000 for additional nominations of mares, and a sum of £2,000 for a scheme for promoting the breeding of Irish draught horses. This work has been grafted on to the existing horse breeding scheme and the developments now undertaken are being conducted in connection with that scheme.

The Department have also, at the request of the Treasury,

furnished the Development Commissioners with reports on applications for advances from the Development Fund submitted by the Irish Bee-Keepers' Association, the Irish Tobacco Growers' Association, the Irish Agricultural Organisation Society, the Kinsale Harbour Commissioners, and the County Council of Down.

As mentioned in the Tenth Annual Report, the draft heads of a Bill based on the recommendations of the  
 IRISH DAIRYING Departmental Committee on the Irish  
 INDUSTRY BILL. Butter Industry, were submitted to the Council of Agriculture at their meeting on the 19th October, 1910, and were approved by the Council subject to some amendments. The draft as approved by the Council was published by the Department, and copies were sent to the proprietors of Irish creameries and butter factories, to the County Committees of Agriculture, and to the Cork Butter Market Trustees, the Irish Agricultural Organisation Society, the Irish Butter Trade Association, and the Irish Creamery Managers' Association.

In the main the suggestions offered by these bodies were consonant with the object of the Bill, but some amendments were proposed which, in the opinion of the Department, could not be accepted without destroying the effective character of the Bill as a means of protecting and promoting the interests of the Irish creamery butter industry.

Much progress has since been made in settling the details of the measure by means of interviews with representatives of the different interests concerned. As a result, the Department hope that when the Bill is introduced into Parliament most of its provisions will have been already discussed and accepted by those qualified to speak on behalf of the butter industry in Ireland.

In the last Annual Report reference was made to the appointment of a Departmental Committee "to inquire into the present state of the flax-growing industry in Ireland, and the causes which are contributing to the decline of that industry, and to submit recommendations." The Committee having made a most exhaustive inquiry into the matters referred to them for investigation, submitted their report to the Department on 20th January, 1911. The report was subsequently presented to Parliament and published.

It is satisfactory to note that, notwithstanding the serious decline which had taken place in the growing of flax in Ireland, the Committee found that there were some considerations which pointed to a revival of the industry and its probable extension in certain parts of the country. As a result of their examination of the various causes assigned for the decline, the Committee made certain valuable recommendations and suggestions. The

Department have already given effect to the more important of these, while other measures suggested by the Committee are receiving attention.

The question of the disposal of flax water, which has for so long been a source of friction between flax growers and those concerned in the preservation of fisheries, was also investigated by the Committee. Their recommendations on this subject include proposals for the modification of the law relating to the pollution of rivers by flax water, and to the initiation of prosecutions in that connection. These recommendations are still under the consideration of the Department.

In the discharge of their duties as the central fishery authority of Ireland, the Department have for some time been considering the important effects of the operations of the Land Purchase Acts on the Irish Fisheries and especially on the salmon fishing industry. The magnitude of the interests involved in the salmon

fisheries is indicated by the fact that the industry is worth to this country about £500,000 per annum. The value of the public salmon fisheries at the estuaries of rivers and in the sea depends on the proper treatment of the upper reaches of the rivers where spawning takes place. Hitherto the fishing rights in fresh waters have usually been in the hands of large owners, but with the division of the larger holdings and the transfer of the land to tenant purchasers, the conditions affecting the fisheries are undergoing a considerable change. In cases where the new riparian owners have acquired fishing rights they, as a general rule, show a tendency to be more active in exercising these rights than were their predecessors, and one of the methods of fishing most commonly adopted is that of netting the pools in the rivers and spawning streams. Should indiscriminate fishing by such means as this be allowed to prevail generally it would largely stop the passage of fish down to the sea and from the sea up to the spawning beds. The inevitable results would be a depletion of the stock of fish in the rivers and a shortage of fish available for public catching in the salt waters outside the river mouths.

In view of the great importance of the fisheries as a public national asset, and of the many and conflicting interests which would be affected by any material change in the methods of protection now in force, the Department felt that this question of the effects of land transfer on the Irish fisheries should form the subject of a public inquiry. The Vice-President accordingly appointed a Departmental Committee for the purpose. The Committee consists of the following members:—

- The Right Hon. Sir David Harrel, K.C.E., K.C.V.O., etc. (Chairman);
- The Right Hon. Mr. Justice Ross, Land Judge, High Court of Justice in Ireland.
- The Right Hon. F. S. Wrench, Estates Commissioner.
- The Rev. John Pentland Mahaffy, D.C.L., LL.D., C.V.O., etc., Senior Fellow of Trinity College, Dublin.



Stephen L. Gwynn, Esq., M.P.

W. L. Calderwood, Esq., F.R.S.E., Inspector of Salmon Fisheries for Scotland.

W. S. Green, Esq., C.B., M.A., F.R.G.S., M.R.I.A., Chief Inspector of Fisheries for the Department of Agriculture and Technical Instruction for Ireland.

The terms of reference to the Committee are :—

“To inquire into the effects which changes in the ownership of land in Ireland under the Land Acts have had or may be expected to have on the Fisheries of the country, and in particular on the Salmon Fishing Industry, and to make recommendations as to what steps, if any, it may be desirable in the circumstances for the State to adopt in the interests of Irish Fisheries.”

The Committee are at present engaged in prosecuting their inquiry, and have held a number of public sittings in different parts of the country for the reception of evidence.

As indicated in their last Report, the Department have for some time had under consideration the question of agricultural credit available for the rural classes in Ireland, with a view to ascertaining not only what improvements are called for in the existing system of Raiffeisen Banks, but also what form of agricultural credit is best adapted to meet the needs of the occupiers of land affected by the Land Acts throughout the country generally, and more especially in the western districts, where large areas of grazing land are being sub-divided into suitable farms, and allotted to men brought from uneconomic holdings. These men have, as a rule, little, if any, capital, and, generally speaking, are backward in the knowledge of practical farming.

The provision by the Department of teachers and overseers, for the purpose of instructing and advising these new occupiers, has met with much success; but some scheme is urgently required whereby these holders can obtain, on favourable terms, sufficient capital for the stocking and equipping of their farms. Such cases, as previously intimated, cannot be met by the existing agricultural credit societies, as the loans needed are larger than can be obtained from Raiffeisen Banks.

The question was under the consideration of the Council of Agriculture at their meeting in May, 1911, when a resolution was unanimously adopted asking the Department to devise and carry out some general scheme by which tenants receiving new tenancies in Congested Districts under the operations of recent Land Acts might obtain financial aid towards stocking their farms and starting life under economic conditions.

The Department have all along realised that the whole problem is one of much complexity, and believed that it should be dealt with, in the first instance, by means of a comprehensive and systematic inquiry by a Departmental Committee. They are

glad to state that, as a result of their representations on the matter, the consent of the Treasury has now been obtained to the appointment of the proposed Committee.

A Committee consisting of the following members has accordingly been appointed by the Vice-President :—

GEORGE MURNAGHAN, Esq., J.P. (who acted as a Member of the Irish Poor Law Commission), Chairman.

ROBERT KYLE KNOX, Esq., LL.D. (late Chairman of the Board of Directors of the Northern Banking Company, Limited).

CHARLES F. BASTABLE, Esq., M.A., LL.D., Professor of Political Economy, and Regius Professor of Laws, Dublin University.

The Right Honble. WILLIAM F. BAILEY, C.B., one of the Estates Commissioners for Ireland.

Reverend THOMAS A. FINLAY, M.A., Vice-President of the Irish Agricultural Organisation Society, and Professor of Economics in the National University of Ireland.

Sir ROBERT ANDERSON, J.P. (of the firm of Messrs. Anderson and Macauley, Belfast).

WALTER MACMORROGH KAVANAGH, Esq., D.L.

THOMAS PATRICK GILL, Esq., Secretary of the Department of Agriculture and Technical Instruction for Ireland.

The following are the terms of reference to this Committee :—

“To inquire into the existing system of credit available for the rural classes in Ireland; to suggest what, if any, improvements, not involving financial assistance from the Exchequer, should be made in the system; and to consider especially the form of agricultural credit most suitable to the requirements of the occupiers of land affected by the Land Acts in the western districts, and throughout the country generally.”

The Committee will shortly commence their sittings for the taking of evidence, and they hope, in view of the admitted urgency of the problems to be dealt with, to be able to submit their report at the earliest possible date.

In the year under review, the special schemes devised to meet the needs of small farmers in the congested districts have been largely extended, and a system of veterinary dispensaries has been established (see page 44). These developments have been rendered possible by the provision made in Section 49 of the Irish Land Act of 1909. Under this Section an annual sum of £19,000 is provided to enable the Department to exercise the powers and carry out the duties transferred to them under that Act.

The Department arranged an agricultural, educational and industrial exhibit in connection with the festival of “Ui Breasail,” which was held in Dublin in May and June, 1911, under the auspices of the Women’s National Health Association.

The Department are paying special attention to the burning of lime throughout the country. A large number of deposits of limestone have been reported upon and expert advice given to persons interested. An expert lime burner has given instruction at the following places :—Firpark, Borrisokane, County Tipperary; Cornacassa, County Monaghan; Knockenaugh, Lisselton, County Kerry; Ballybunion, County Kerry; Camp, Castlegregory Junction, County Kerry. At Ballinalree, County Longford, a limekiln has been erected by a farmers' lime-burning society according to plans and specifications supplied by the Department. An instructor in lime-burning gave a five weeks' course of instruction at this kiln.

The Department have continued to act as a bureau of information with regard to the mineral and raw material resources of the country, and to make inquiries and give advice on many matters relating to these resources.

The Department have continued to make small grants of books (not exceeding £8 in value) to libraries established in rural districts. The object of these grants is to provide village communities with suitable books relating to agriculture, technical education, domestic economy, etc., in order to encourage the study of these subjects and to stimulate an intelligent interest in the Department's work. Grants are made only in cases where a committee has been formed for the management of the library, where a collection of books has already been made by local effort, and where the Department have reason to believe that the library will be a useful auxiliary to their schemes of agricultural and technical instruction in the district.

## PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS, 1910-11.

### I.—AGRICULTURE,

This section of the Report deals with the agricultural year ended 30th September, 1911.

The Department's contribution in aid of county agricultural schemes during the period under review was made on the new basis mentioned in the Tenth Annual Report. Any portion of this contribution remaining unexpended in any county when

all liabilities under the 1910-11 schemes have been discharged will be placed to the credit of that county in the Department's books and be available for county schemes in a subsequent year.

(a.) AGRICULTURAL INSTRUCTION.

During the year 1910-11 itinerant instruction continued to be the chief means for the promotion of agricultural education throughout the country. The several schemes are increasingly appreciated both by the county committees of agriculture, by whom they are administered, and by the public whom they serve. It is becoming each year more evident that the system of itinerant instruction has not merely a temporary function, viz., to prepare the ground for permanent institutions, but that it also meets the needs of certain sections of the rural population which are outside the scope of other educational agencies. It is highly probable that, even when the country shall have been fully supplied with schools and colleges for the teaching of agriculture and kindred subjects, the itinerant instructor will still be a powerful factor in the development of Ireland's chief industry.

The four principal schemes of itinerant instruction are those in agriculture, horticulture, poultry-keeping and butter-making. The number of instructors employed by county committees under each of these schemes during the year 1910-11 was as follows :—

Scheme of instruction in agriculture .. ..	40
"          "          " horticulture and bee-keeping, .. ..	39
"          "          " poultry-keeping .. ..	35
"          "          " butter-making .. ..	33
	—
	147

In 17 counties the instructors in poultry-keeping acted also as instructors under the butter-making scheme; the total number of persons employed was, therefore, 130.

As compared with the preceding year, the figures show an increase of four instructors in agriculture, three in horticulture and bee-keeping, and two in poultry-keeping. The number of instructors in butter-making was unchanged.

In the early years of the Department's work there were separate schemes for horticulture and for bee-keeping. Experience showed that these schemes could be combined with advantage, and the duties entrusted to one instructor qualified to act in the dual capacity. In the case of the scheme of poultry-keeping and butter-making, an analogous change is taking place. The schemes are still separate, but as the principal portion of the work under the poultry scheme is performed in the winter months and the work under the butter-making scheme is mainly confined to the summer, county committees making new appoint-

ments prefer, as a rule, to employ one instructor to carry on the two schemes. This results in the instructors' being appointed for the entire year instead of for periods of from six to nine months as formerly.

The main lines of each scheme are substantially the same. The instructors are all required (1) to deliver evening lectures or conduct day classes, (2) to visit farms, gardens, poultry-runs, or dairies as the case may be, for the purpose of giving advice individually, and (3) to conduct field or garden demonstrations or give practical lessons in the class-room or elsewhere. Numerous other duties are assigned to the instructors in connection with the various branches of the Department's work, but it is under the three heads mentioned that the greater portion of their time is divided.

The effects of the purely itinerant work are made more obvious each year by the steady growth of the demand for courses of instruction of a more thorough character than can be provided by evening lectures. During the year 1910-11 such courses were conducted by the itinerant instructors in agriculture, poultry-keeping and butter-making in almost all counties. These courses, which are held in the day-time, cannot, on that account, be attended by nearly so many persons as can avail themselves of the evening lectures, but the loss in this respect is much more than compensated for by the superior quality of the work done and the more permanent results achieved.

The following table shows the extent of the work under the heads mentioned conducted by the itinerant instructors in the year 1910-11 :—

Instructor in	No. of Lectures delivered.	Estimated attendance at Lectures.	No. of Classes conducted.	No. of Students admitted to Classes.	No. of Visits to Farms, Gardens, Dairies, etc.	No. of Demonstration Plots laid down.
Agriculture . . . . .	776	35,500	78*	1,339	14,709	2,124†
Horticulture and Bee-keeping . . . . .	207	8,487	—	—	31,273	302
Poultry-keeping . . . . .	531	28,674	1,552	20,176	14,225	—
Butter-making . . . . .	185	3,113	3,282	26,256	6,510	—

The number of hours' instruction at agricultural classes is usually about 150, and at classes in butter-making and at tutorial poultry classes about 20 each. The maximum number of students admitted is, unless in exceptional circumstances, 24 at agricultural classes, 18 at poultry classes, and 12 at butter-making classes.

\* Five teachers were specially employed for these classes in addition to Country Instructors.

† Exclusive of the plots included in 662 agricultural experiments.

The assistant agricultural overseers who are employed directly by the Department under the special schemes for the improvement of farming in the congested districts of the western counties, perform duties similar in some respects to those of the county itinerant instructors in agriculture but within more limited areas. During the year 1910-11 thirty-eight assistant overseers were at work under the immediate direction of five overseers, and no less than 10,586 demonstration plots were laid down under their supervision.

The demand for admission to the more prolonged courses which are provided at permanent agricultural institutions continued to increase. During the year under review no new agricultural school was opened, but operations in connection with the establishment in county Antrim of a school for twenty-five male students were pushed forward and it is hoped that class work will begin there in 1912. For female students thirty additional residential places were provided during the year by extensions of the accommodation at existing schools.

The following table shows the number of places held by resident students at institutions under the Agricultural Branch of the Department during the past two years:—

Male Students.		1909-10	1910-11
Institutions under Department's Management (7)	.	169*	176*
Institution under private Management	.	20	20
TOTAL,		189	196
Female Students.			
Institutions under Department's Management (2)	.	84	104
Institutions under Private Management (7)	.	115	122
TOTAL,		199†	226†

The training of itinerant instructors and teachers for agricultural schools was continued as heretofore at the Royal College of Science, the Albert Agricultural College, and the Munster Institute. During the year 1910-11 sixteen students completed their course successfully. No less than one hundred and forty persons trained at these institutions are now employed either by county committees of agriculture or directly by the Department.

\* Includes 22 students, mostly holders of scholarships at the Royal College of Science, for whom maintenance allowances were provided instead of residential accommodation at one of the Department's institutions.

† At the Department's institutions for female students four sessions are held annually, and at private institutions two sessions annually. The number of places filled throughout the year, as shown above, is, therefore, much less than the number of pupils admitted.

In July, 1911, the new Royal College of Science buildings were formally opened by His Majesty King George V., and by October, 1911, all was in readiness for the work of the 1911-12 session. Students of the agricultural faculty are now provided with the most favourable facilities for obtaining a thorough training in all branches of their work.

The full associate course of training at the College required in order to obtain a diploma has hitherto been of three years' duration. It is proposed, however, to extend the course to four years in future. The scholarships offered annually by the Department in connection with the agricultural faculty will, consequently, be continued for a fourth year to enable students to complete the full programme.

The training of teachers for employment under the Department's programme of agricultural education was continued as in previous years.

Seven students (six being scholarship holders and one a fee-paying associate student) completed the three years' course of training in June, 1910. Of these, six obtained the college associateship in agriculture, and one in horticulture. During 1910-11 all received appointments in connection with the Department's educational schemes.

Up to the end of the 1910-11 session, seventy-two students who entered the faculty as holders of scholarships provided by the Department had completed their course. Of these, thirty-five are employed as itinerant instructors in agriculture, three as teachers of agricultural classes, nine at the Department's colleges and stations, and twelve on the central staff of the Department.

Seventy-eight candidates sat at the examination for scholarships in the faculty of agriculture held in August, 1910, in accordance with the terms of the prospectus printed in the Appendices, page 209, of this Report, and, as a result, eleven new scholarships, ten in agriculture and one in forestry, were awarded. None of the candidates in horticulture or creamery management reached the qualifying standard. Twenty-two scholarships awarded in the previous years, viz., twenty in agriculture, one in forestry, and one in horticulture, were renewed in full for the 1910-11 session. There were three fee-paying associate students in the faculty during the session.

The total number of students in the faculty at the close of the session in June, 1911, was :—

First Year, .. ..	12
Second Year, .. ..	13
Third Year, .. ..	11
	—
	36

Eight of the third year students passed their final examinations and were awarded the college associateship in agriculture.

The courses of training in agriculture and horticulture provided at the Albert Agricultural College were continued in 1910-11.

ALBERT  
AGRICULTURAL  
COLLEGE.

The agricultural course extended from the 11th October, 1910, to the 11th August, 1911, and the horticultural course from 11th October, 1910, to 30th September, 1911.

The agricultural course forms an excellent training for young farmers who desire either to enter the agricultural faculty of the Royal College of Science or to follow the farming profession in Ireland. The entrance examination for this course was held in September, 1910, and was attended by seventy-one candidates, an increase of eleven as compared with the previous year. Thirty-two of these candidates qualified for entrance to the course and were admitted. Places were also awarded to three other applicants, viz., one who had qualified for entrance in 1909; one who had qualified as a result of his answering at the 1911 examinations for scholarships in agriculture at the Royal College of Science; and one who had gained a scholarship provided by the Kilkenny county committee of agriculture from the joint fund administered by that body. The competition for this scholarship, which was of the value of £50, was confined to students who had attended winter agricultural classes held in county Kilkenny under the Department's scheme for such classes. The award was made on the result of a special examination conducted by the Department, at which nineteen candidates attended. The total number of students admitted to the course was, therefore, thirty-five, all of whom were sons of farmers. The programme of the entrance examination is given in the Appendices, page 211.

Four students of the college were successful in obtaining scholarships in agriculture, tenable at the Royal College of Science, at the examination held in August, 1911.

The horticultural course was conducted on the same lines as in the previous year. This course is intended only for persons who have had thorough practical experience of garden work, and was designed mainly to enable the students to become qualified for appointments as county instructors under the Department's scheme of instruction in horticulture and bee-keeping. The students receive payment for the work done by them in the gardens, and they are provided with furnished lodgings in a suitable building on the college farm. As the accommodation is limited, not more than eight or nine students can be admitted to any one session.

Seventeen applicants for admission to the 1910-11 session were admitted to the entrance examination in August, 1910, and of these seven were found fit to take advantage



of the course of instruction. Two students who had attended the 1909-10 session were re-admitted for a second year's training. The number of students at the 1910-11 session was, accordingly,

First Year, .. ..	7
Second Year, .. ..	2
Total, .. ..	9

As a result of the examinations held at the conclusion of the session, the two second-year students were approved as qualified for appointment to county instructorships, and three of the first-year students were re-admitted for further training.

One past student of the school, who completed his course successfully in September, 1910, was appointed, during the year under review, as instructor in gardening at the Department's agricultural schools for girls in counties Mayo and Sligo.

Twenty-nine men, trained in the school, are now employed in connection with the Department's horticultural work.

The course at the horticultural school includes instruction in bee-keeping. One instructor under the Department's scheme of instruction in horticulture and the management of bees, who had not been passed as qualified in bee-keeping, received a special short course of training at the school during 1910-11, and passed the qualifying examination. All the instructors in horticulture are now qualified to act as instructors in both horticulture and bee-keeping, except in the case of one of the three counties, where special instructors in bee-keeping are still employed by the county committees of agriculture, in addition to the horticultural instructors.

The programme of the entrance examination for the horticultural school is given in the Appendices, page 213.

The following table shows the number of candidates for admission to, and number of students in residence at, the Albert Agricultural College for the year 1910-11 and the two previous years :—

	Candidates			Students in Residence		
	1908-9	1909-10	1910-11	1908-9	1909-10	1910-11
Agricultural course, ..	51	60	71	25	35	35
Horticultural course, ..	6	13	17	6*	7	9
Royal College of Science course .. .	—	—	—	16	16	15
TOTALS, ..	57	73	88	47	58	59

\* Resided at lodgings in Glasnevin Village.

Farm apprenticeships for persons who proposed to follow farming in Ireland were provided, as in previous years, at the Department's agricultural stations at Athenry, Ballyhaise, and Clonakilty. The course at Athenry

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STATIONS.

differs considerably from that given at the two other stations. At Athenry the training is confined, almost exclusively, to practical work on the farm, while at Ballyhaise and Clonakilty the apprentices spend a considerable portion of the day during the winter and spring months at class work. Fees based on the valuations of the holdings of the parents or guardians of the apprentices are charged at Ballyhaise and Clonakilty, while apprentices are admitted free to Athenry, where the accommodation is of a temporary character. In addition, apprentices at Athenry may be granted at the conclusion of the course bonuses, not exceeding £10 in any case, according to their conduct and attention to work during the session. The session at Ballyhaise differed from that at Clonakilty, inasmuch as it consisted of two terms, the winter and summer, the former extending from October to April, and the latter from April to August.

In addition to the course for farm apprentices, a course of instruction in creamery management was conducted at Ballyhaise agricultural station from October, 1910, to March, 1911. The minimum age for admission to this course was reduced in 1910 from 20 years to 18 years. There were eleven students, all of whom attended the examination in technical subjects as applied to creamery management held in March, 1911. Seven passed in all the subjects, two passed in three subjects, and two in two subjects, of the examination. At the termination of the course of training at Ballyhaise the Department provide as far as possible facilities for suitable students to obtain further practical training in the actual work of creamery management at selected creameries. These students are allowed a sum of 10s. per week for maintenance in addition to free instruction while they are engaged in creameries. Seven of the creamery students at the 1910-11 session received further instruction of this nature.

Two students were admitted to Ballyhaise agricultural station at a fee of £5 each as apprentices in cheese-making during the season May to October, 1911. Brief details of the results of the cheese-making experiments are given at page 85 of this Report.

At Clonakilty agricultural station the session lasted from October, 1910, to August, 1911. Three of the pupils were admitted as holders of scholarships of the value of £20, offered by the Wexford County committee of agriculture, for competition amongst students who had attended winter agricultural classes in that county. The scholarships were awarded on the results of the special examination held by the Department. The agricultural committees of three counties—Kilkenny, Tipperary, N.R., and Wexford—have provided similar scholarships at Clonakilty station for the 1911-12 session.

The total number of students, including paid apprentices, at

the agricultural stations for the years 1907-8, 1908-9, 1909-10, 1910-11, was as follows:—

	1907-8	1908-9	1909-10	1910-11
Athenry, . . . . .	10	10	12	12
Ballyhaise, . . . . .	26	35	39	38
Clonsilla, . . . . .	30	30	30	30
	66	75	81	80

The percentage of agricultural students of each class at the three stations during these years was as follows:—

Valuation of Parents' Holding	Percentage of Total Agricultural Students			
	1907-8	1908-9	1909-10	1910-11
Sons of farmers the annual valuation of whose holdings was:—				
Under £20 . . . . .	32	31	31	27
Between £20 and £40 . . . . .	26	19	26	28
„ £40 and £100 . . . . .	22	22	17	16
Over £100 . . . . .	9	9	20	20
Sons of persons other than farmers . . . . .	11	19	6	6
	100	100	100	100

The scheme was altered somewhat from its form in previous years, the more important alterations being:

1.—Students resident not less than three statute miles from their class centre were made eligible for the award of a travelling allowance of one penny per mile for every mile, in excess of six miles, of the double journey between their home and the class centre. In the preceding year students were not eligible for an allowance unless they were resident more than four miles from the class centre. Those students who travelled by rail were, as usual, allowed third-class fare; and 2.—no applicant was permitted to join a class after the lapse of two weeks from the opening date.

Twenty-seven county committees of agriculture adopted the scheme, and classes were established at seventy-eight centres. Thirteen hundred and thirty-nine students in all were admitted to the classes. In counties Cavan and Kerry classes under the scheme were held for the first time, while those counties in which the scheme had been in operation for the year 1909-10 continued the scheme for the year under review, with the exception of county Westmeath. At the classes held in the last-named

county during the year 1909-10, the attendance of students had been disappointing.

As compared with the figures for the preceding year, there was an increase of eight in the number of classes, and of nearly two hundred in the number of students.

Thirty-five teachers of agriculture were employed, five of these having been specially engaged for the work, while the remainder were county itinerant instructors under the agricultural instruction scheme.

The following table shows the extent to which the scheme of winter agricultural classes has been availed of since its inception :—

Year	Number of Counties	Number of Classes	Number of Students
1902-3, . . . . .	2	2	44
1903-4, . . . . .	7	7	161
1904-5, . . . . .	8	18	317
1905-6, . . . . .	11	25	422
1906-7, . . . . .	12	28	449
1907-8, . . . . .	15	33	529
1908-9, . . . . .	20	50	875
1909-10, . . . . .	26	70	1,166
1910-11, . . . . .	27	78	1,339

For copy of the scheme see page 254 of the Appendices.

Details as to the classes held during the 1910-11 session are given in the following table :—

COUNTY AND CLASS CENTRES.	Duration of Course in Weeks.	Number of Days weekly on which Class met.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Co. Antrim— Ballycarry . . . . .	16	2	18	} Veterinary Hygiene, Horticulture and Poultry-keeping.
Ballymena, . . . . .	16	2	26	
Co. Armagh— Hamiltonsbawn, . . . . .	16	2	13	} Veterinary Hygiene and Horticulture.
Lurgan, . . . . .	16	2	12	
Co. Carlow— Bagenalstown, . . . . .	16	2	8	} —
Clonmore, . . . . .	16	2	9	
Co. Cavan— Derryham, . . . . .	15	2	23	} Horticulture.
Loughdaff, . . . . .	15	2	17	
Maghera, . . . . .	15	2	13	
Co. Clare— Corofin, . . . . .	16	2	19	} Veterinary Hygiene and Horticulture.
Tulla, . . . . .	15	2	24	

COUNTY AND CLASS CENTRES	Duration of Course in Weeks.	Number of Days weekly on which Class met.	Number of Students admitted.	Subjects other than Agriculture, in which instruction was given.
Co. Cork—				
Ballycough, . . .	14	2	16	Veterinary Hygiene and Horticulture.
Beeing, . . .	15	2	15	Horticulture.
Charleville, . . .	16	2	16	Veterinary Hygiene and Horticulture.
Clogagh, . . .	†13	2	12	} Veterinary Hygiene and Horticulture
Cloghroe, . . .	15	2	21	
Cullin, . . .	15	2	12	Horticulture.
Doneraile, . . .	15	2	12	Veterinary Hygiene and Horticulture.
Inchigeela, . . .	15	2	11	} Horticulture.
Kealkil, . . .	15	2	16	
Reenascrana, . . .	†12	2	35	} Veterinary Hygiene and Horticulture.
Rossmore, . . .	†14	2	29	
Toames, . . .	15	2	15	Horticulture.
Tracton, . . .	16	2	20	Veterinary Hygiene and Horticulture.
Co. Down—				
Downpatrick, . . .	16	2	19	} Veterinary Hygiene and Horticulture.
Dromore, . . .	16	2	26	
Co. Fermanagh—				
Derrykeeghan, . . .	* 6	2	5	} Horticulture.
Skea, . . .	16	2	8	
Co. Galway—				
Gurteen, . . .	*13	2	14	} Horticulture.
Headford, ] . . .	17	2	13	
Co. Kerry—				
Ballylongford, . . .	18	2	12	} Horticulture.
Castleisland, . . .	19	2	16	
Co. Kilkenny—				
Johnstown, . . .	16	2	32	} Horticulture.
Kells, . . .	16	2	20	
Muckalee, . . .	16	2	33	
Owning, . . .	16	2	20	
Windgap, . . .	16	2	22	
King's County—				
Killeigh, . . .	19	2	17	} Horticulture.
Moneygall, . . .	19	2	17	
Co. Leitrim—				
Kinlough, . . .	15	2	24	} Horticulture.
Manorhamilton, . . .	16	2	24	
Co. Limerick—				
Bruree, . . .	17	2	7	} Horticulture.
Croagh, . . .	16	2	9	
Doon, . . .	17	2	25	
Hospital, . . .	* 1	—	—	
Kilcolman, . . .	16	2	12	

† Class interrupted owing to illness of teacher.

\* Class discontinued owing to poor attendance.

COUNTY AND CLASS CENTRES.	Duration of Course in Weeks.	Number of Days weekly on which Class met.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Co. Londonderry—				
Garvagh, . . . . .	18	2	29	Veterinary Hygiene and Horticulture.
Magherafelt, . . . . .	17	2	31	
Co. Longford—				
Aughnaccliffe, . . . . .	*12	2	11	Horticulture.
Ballinacree, . . . . .	16	2	10	
Co. Louth—				
Dunleer, . . . . .	16	2	10	Horticulture.
Co. Mayo—				
Castlebar, . . . . .	16	2	14	Horticulture.
Charlestown, . . . . .	16	2	22	
Kiltinagh, . . . . .	17	2	13	
Partry, . . . . .	17	2	19	
Swinford, . . . . .	17	2	13	
Co. Meath—				
Dunshaughlin, . . . . .	17	2	4	Horticulture.
Longwood, . . . . .	16	2	6	
Navan, . . . . .	16	2	7	
Queen's County—				
Ballickmoyler, . . . . .	16	2	23	Horticulture.
Quarrymount, . . . . .	17	2	11	
Co. Roscommon—				
Callow, . . . . .	15	2	13	Horticulture.
Croghan, . . . . .	14	2	13	
Co. Sligo—				
Kilmactelgue, . . . . .	16	2	27	Veterinary Hygiene and Horticulture.
Mullinabreena, . . . . .	15	2	20	
Co. Tipperary, N.R.—				
Roscrea, . . . . .	16	2	31	Veterinary Hygiene and Horticulture.
Thurles, . . . . .	15	2	32	
Co. Tipperary, S.R.—				
Clonmel, . . . . .	16	2	15	Veterinary Hygiene and Horticulture.
Dundrum, . . . . .	16	2	21	
Co. Tyrone—				
Aughier, . . . . .	17	2	11	Veterinary Hygiene and Horticulture.
Ballinamallaght, . . . . .	17	2	20	
Brigh, . . . . .	16	2	8	
Feglish, . . . . .	17	2	17	
Greencastle, . . . . .	17	2	23	
Co. Waterford—				
Clashmore, . . . . .	15	2	23	Horticulture.
Rathgormack, . . . . .	15	2	18	
Co. Wexford—				
Oulart, . . . . .	17	3	12	Horticulture.
Poulnesty, . . . . .	18	3	25	

Total—78 classes .. 1,339 students.

\* Class discontinued owing to poor attendance.

It will be observed from the foregoing table that, in addition to the ordinary agricultural teaching, instruction in veterinary hygiene was provided at twenty-nine classes, and outdoor demonstrations in horticulture by the county itinerant instructor in that subject were given at seventy-six classes. The horticultural demonstrations were purely practical, no lectures being given. About six of these demonstrations, of from one to two hours' duration, were given at each centre. In county Antrim some lessons in poultry-keeping by the county itinerant instructor were given at each of the two classes.

According to clause 4 (4) of the scheme, the classes were to be held in the morning and afternoon, and in the great majority of cases this regulation was strictly adhered to. In the case of one or two centres, however, afternoon class hours solely were sanctioned, in view of exceptional circumstances, such as an inconvenient train service. It is obvious that these classes are more effective when held during the day than in the evening, as, among other reasons, much of the work, such as the examination of grasses and seeds, land surveying, etc., must be done by daylight. If evening classes were held the students would perform their farm work before attending, and would arrive at the classes with their energies more or less exhausted. They would thereby be unfitted to some extent for deriving full benefit from the instruction provided. County committees of agriculture generally appreciated fully the advantages of day classes, and students willingly attended, although it necessitated their absence from farm work during the day.

In the majority of cases the classes were entered for the earning of grants under the Department's programme for technical schools and science and art schools and classes. The grant for instruction of this nature given at these classes was, in 1910-11, at the rate of 3*d.* per attendance hour. A class of, say, sixteen students, attending with ordinary regularity, would, at this rate, earn a grant of about £20 for the session's work.

The Kilkenny, Tipperary, N.R., and Wexford county committees of agriculture offered, for competition among the students of their classes, scholarships of the value of £20 each, tenable at the Department's agricultural stations at Ballyhaise or Clonakilty for the 1911-12 session. In the case of each county the Department held a competitive examination, on the results of which the scholarships were awarded. Four scholarships were awarded in county Tipperary, N.R., three in county Kilkenny, and three in county Wexford.

It may be noticed in this connection that students of winter agricultural classes who have attended satisfactorily and have applied themselves to the work, receive preference over other applicants for farm apprenticeships at the Department's agricultural stations, and in their cases the usual entrance examination is dispensed with.

In recent years the Department have observed with satisfaction that past students of the classes have been prominent

in aiding itinerant instructors in agriculture in carrying out experimental agricultural work under the scheme of agricultural instruction, and in forming societies for the development of agriculture generally in their respective districts.

At Mountbellew school (see page 220 of the Appendices) the Franciscan Brothers conducted a course in agricultural and horticultural subjects which opened on the 6th September, 1910, and closed on the 28th June following.

The practical training of the students in farm work of all kinds was an important feature of the course. The college buildings and attached farm are now very fully equipped with the apparatus necessary for the teaching of elementary science as applied to agriculture, and with modern farm machinery and implements. Twenty students attended during the session, all of whom resided in the college.

It was mentioned in last year's Report that a house and some 260 acres of land had been acquired by the Department at Greenmount, near Muckamore, county Antrim, for the purpose of establishing an agricultural school for north-east Ulster. Possession of the holding was given to the Antrim County Council,

by whom structural alterations necessary to fit the house for use as a school were undertaken. It is anticipated that the work will be sufficiently advanced to admit of day classes being held in 1912. When the school buildings shall have been completed, accommodation for about twenty-five resident students will be available. The Department are bearing the capital expenditure of the undertaking, and the cost of maintaining the school will be borne by the joint fund for agricultural schemes administered through the Antrim county committee of agriculture. The Down county committee of agriculture will contribute to the upkeep of the school in respect of six places which are to be reserved for students from that county. A portion of the lands is under timber, and the Department are bearing the cost of the operations necessary for the maintenance of the wooded area.

Negotiations for the purchase of a farm within two miles of Strabane for the purposes of an agricultural institute for north-west Ulster are approaching completion, and it is expected that possession will be obtained early next year.

AGRICULTURAL  
INSTITUTE  
FOR NORTH-WEST  
ULSTER.



The Department's programme of agricultural education for girls was carried on at eleven schools, of which nine are residential. Of these the Munster Institute at Cork, and the Ulster Dairy School at Cookstown, county Tyrone, are central institutions managed

AGRICULTURAL  
SCHOOLS  
FOR GIRLS.

by the Department directly, and open to pupils from all parts of the country. At the nine other centres local schools of rural domestic economy are working, under private management, subject to the Department's supervision. The latter schools are intended chiefly for girls living in their immediate neighbourhood who attend as day-pupils, but residential places are provided for those who cannot return daily to their homes.

At the Munster Institute and Ulster Dairy School there are four terms annually. At the local residential schools the year is divided into two terms. The fee per term in both cases is £8 8s., or £3.

The aim of these schools is mainly to train girls of the farming class in the work usually assigned to them in their own homes. In addition, the Munster Institute and Ulster Dairy School provide advanced courses to enable pupils to qualify for employment as (a) dairymaids in creameries or large dairies, (b) county instructors in dairying and poultry-keeping, and (c) teachers at agricultural schools for girls. The course for (a) occupies three terms, and that for (b) and (c) extends to at least six terms.

The principal subjects of the programme are :—

Dairying,  
Poultry-keeping,  
Cottage gardening,  
Household management,  
Cookery,  
Sewing,  
Laundrywork.

Instruction in butter-making and poultry-keeping is also provided at two schools of domestic training (Dunmanway, county Cork, and Dundrum, county Tipperary), which have been recognised for the award of girls' scholarships by county committees of agriculture and of technical instruction.

At all schools the qualifications of the teachers employed must be approved by the Department.

No new agricultural schools for girls were established during the year under review, but provision was made for the reception of 30 additional resident pupils at existing schools, as follows :—

Ulster Dairy School, . . .	20 additional places.
Portumna School of Rural Domestic Economy, . .	5    "    "
Swinford school of do. do.	5    "    "

In all, places for 245 resident pupils are provided. The full number of pupils is at present in training.

Greater facilities were provided during the year 1910-11, in connection with agricultural schools for girls, for the training of dairymaids for creameries or large dairies. Suitable pupils who complete two sessions' training at any of these schools can now be admitted to the third term course at the Munster Institute or Ulster Dairy School, on conclusion of which apprenticeships in creameries are awarded to the best pupils, who are thus enabled to obtain a thorough practical training under actual commercial conditions in the several branches of work assigned to dairymaids in creameries.

The attendances at the four sessions which were held at the institute during the year amounted to 225.

MUNSTER At the end of the year there were 220 applicants awaiting their turn for admission.

INSTITUTE, The courses for the training of teachers

CORK. and of county instructors were continued

during the year. Six students passed their final examinations for these positions. Five qualified students of the institute obtained employment in connection with the teaching of the Department's programme. The total number of pupils so employed now amounts to 52, viz., 23 instructors in poultry-keeping and butter-making, 1 instructor in poultry-keeping only, 8 instructors in butter-making only, and 20 teachers in agricultural schools for girls.

The four terms held at this school during the year were attended by 137 students. In addition

ULSTER to these applications for admission were

DAIRY SCHOOL, received from 110 other girls. The structural alterations and additions referred to

COOKSTOWN. in last year's Report were completed, and

50 pupils are now admitted to each term.

Prospectuses of the Munster Institute and the Ulster Dairy School will be found in the Appendices, pages 220-221.

These schools, nine in number, work under agreement with the Department and are aided by grants to-

SCHOOLS OF wards the expenses of management, salaries

RURAL DOMESTIC of approved teachers, maintenance of resi-

ECONOMY. dent pupils, and cost of teaching equipment.

Day and resident pupils are received at six schools, day-pupils only at two schools, and resident pupils only at one school. There is an increasing demand for places for resident pupils, but in several cases difficulty is experienced in obtaining a sufficient and regular attendance of day-pupils, especially during the spring and summer months, when the girls are required for work at home.

The following table shows the number of day and of resident pupils admitted to the schools during the year 1910-11 :—

School	Day Pupils	Resident Pupils, including re-admissions	Total
Westport, Co. Mayo, . . .	98	39	137
Claremorris, Co. Mayo, . . .	35	30	65
Swinford, Co. Mayo, . . .	33	20	53
Portumna, Co. Galway, . . .	41	40	81
Clifden, Co. Galway, . . .	19	30	49
Killeshandra, Co. Cavan, . . .	13	14	27
Ramsgrange, Co. Wexford, . . .	—	72	72
Loughglynn, Co. Roscommon, . . .	77	—	77
Benada, Co. Sligo, . . .	95	—	95
Total, year 1910-11 (9 schools)	411	245	656
1909-10 (9 schools) . . .	438	215	653
1908-9 (9 schools) . . .	474	185	659
1907-8 (8 schools) . . .	305	161	466
1906-7 (5 schools) . . .	248	135	383
1905-6 (3 schools) . . .	228	40	268

A large hall for the instruction and recreation of pupils was erected at Loughglynn school during the year at a cost to the Department of £268. The managers afforded valuable assistance towards the promotion of the practice of spraying the potato-crop, by undertaking arrangements for the lending of hand-spraying machines to small holders in the neighbourhood of the school, which is situated in a congested area. Twenty-four machines were supplied by the Department for this purpose. During the season of 1911, ninety-seven persons availed themselves of these arrangements. A small charge is made for the use of the machines.

Alterations and additions to the buildings of Portumna school were carried out during the year, to provide better accommodation for pupils and teachers. The Department made a grant of £256 towards the cost of these alterations. Twenty-five resident pupils are now trained at this school in each session.

The Department's scheme of instruction in agriculture for the year 1910-11 (printed on page 252 of the Appendices) was substantially the same as that for the previous year. It was put into operation by each county committee of agriculture. Forty instructors were employed during the year. Twenty-seven county committees each employed one instructor; three instructors were employed in

county Cork, and two in each of the following counties :—Antrim, Limerick, Mayo, Tyrone and Wexford.

The increase in the number of instructors employed each year since the inception of the scheme may be regarded as a fair indication of the rate at which the work done under the scheme has developed. The following table will accordingly be of interest :—

Year.	No. of instructors employed.				
1900-1,	..	..	..	..	8
1901-2,	..	..	..	..	10
1902-3,	..	..	..	..	10
1903-4,	..	..	..	..	17
1904-5,	..	..	..	..	21
1905-6,	..	..	..	..	23
1906-7,	..	..	..	..	30
1907-8,	..	..	..	..	34
1908-9,	..	..	..	..	36
1909-10,	..	..	..	..	36
1910-11,	..	..	..	..	40

The teaching of agricultural classes was the chief work assigned to the agricultural instructor during the winter months in the great majority of counties, thirty instructors being employed in connection therewith. Itinerant lectures were, however, given by instructors in all counties, and formed an important feature of the work of agricultural education. The lectures given each winter are especially useful as a means of bringing fully before farmers the results of the agricultural experiments conducted by the instructors throughout the country during the preceding season. In all, 776 lectures were delivered at 369 centres, at which close on 35,500 persons attended, giving an average of about 45 per lecture. Lectures are delivered in the evening and during the winter months only. The figures for lectures and attendances thereat have declined since 1907-8 owing to an increasing proportion of the instructors having been employed each year in teaching agricultural classes throughout the lecture season.

During the year 1910-11 the instructors paid 14,709 visits to farms, an average of 368 visits for each instructor.

Particulars of the field experimental and demonstration work carried out by the instructors will be found on page 70 of this Report.

During the summer months, in addition to attending to their experimental work, the visiting of farms, etc., the instructors carried out the work of judging under the Department's scheme of prizes for cottages and small farms. Each instructor judged in a county other than that in which he was employed. The instructors also assisted in work under the Department's dairy

cattle registration scheme and in performing certain duties in connection with the Fertilizers and Feeding Stuffs Act, and the Weeds and Seeds (Ireland) Act.

A conference of the instructors employed under this scheme and the Department's central agricultural staff was held in June, 1911, at the Royal College of Science and at the Albert Agricultural College, Glasnevin. The conference lasted two days, and afforded opportunity for full discussion of the several branches of work carried on by the instructors and of the modifications in the programme of operations proposed for the year 1911-12.

The Department made arrangements by which several of the senior instructors visited, under the guidance of the Professor of Agriculture at the Royal College of Science, a number of farms and agricultural institutions in Great Britain during the last fortnight in June, with a view to becoming better acquainted with agricultural methods practised there. This visit took the place of the educational tour which the Department formerly provided for the agricultural instructors immediately after completion of their course at the Royal College of Science. It is considered that the benefits to be derived from such a tour are greatly increased by its postponement until the instructors have had some experience of the practical problems which confront them in their work in this country, and are in a position to judge to what extent methods not hitherto followed here could be advantageously introduced.

Five overseers and thirty-eight assistant overseers were employed throughout the year. Their duties

AGRICULTURAL  
OVERSEERS IN CON- consisted chiefly in the giving of advice and  
GESTED DISTRICTS. assistance to farmers in all matters relating  
to tillage, to the care and management of  
live stock, and to the purchase of seeds,  
manures, and feeding-stuffs. At the close of the year an additional assistant was appointed to work a district newly formed at Kildysart, county Clare.

The location of these officers is now as follows:—

County Donegal.—One overseer and five assistants.

Counties Mayo, Sligo, and Roscommon.—One overseer and thirteen assistants.

County Leitrim.—One overseer and two assistants.

Counties Galway, Clare, and Roscommon (Castlerea district).—One overseer and twelve assistants.

Counties Kerry and West Cork.—One overseer and seven assistants.

In addition to the above, eighteen extra assistants were employed temporarily during the spraying season to give instruction and demonstrations in the spraying of potatoes and to repair spraying machines.

A large number of plots was again established for the purpose of demonstrating the advantages to be derived from the use of fresh seed and the application of suitable manures. The number of such plots laid down was as follows :—

Description of Plot	Quantity of Seed, &c., supplied for each Plot	No. of Plots
Potato, . . . . .	1 cwt.	2,357
Oats, . . . . .	"	1,357
Barley, . . . . .	"	58
Wheat, . . . . .	"	197
Turnips and Mangels, . . . . .	1 lb.	1,009
Grass, . . . . .	12 lbs.	1,320
Artificial Manures, . . . . .	1 cwt.	1,922
Lime, . . . . .	10 cwts.	192
Basic Slag, . . . . .	2-2½ cwts.	433
Potato Sprouting . . . . .	6-12 boxes	1,032
Vegetables, . . . . .	7 varieties of vegetables	700
TOTAL,		10,586

The distribution of the plots was as follows :—

Donegal, .. .. .	1,672
Mayo, .. .. .	2,601
Sligo .. .. .	223
Roscommon, .. .. .	470
Leitrim, .. .. .	857
Galway, .. .. .	1,763
Clare, .. .. .	702
Kerry, .. .. .	1,385
West Cork, .. .. .	913

The seeds and manures for the sowing of these plots was supplied by the Department at approximately half the gross cost, and the persons who received seed undertook to cultivate their plots in accordance with the overseer's directions. The plots thus established served as examples to farmers in the vicinity.

The number of plots laid down in 1910-11 showed a marked increase over the figures for previous years, as may be seen from the appended particulars :—

1907, . . . . .	8,834
1908, . . . . .	8,288
1909, . . . . .	8,843
1910, . . . . .	9,579
1911, . . . . .	10,586

During the summer the agricultural overseers devoted their energies largely, and the temporary demonstrators in potato spraying wholly, to encouraging farmers to spray their potatoes.

In addition to giving demonstrations and general advice regarding the spraying of the potato crop, the

overseers and demonstrators undertook the sale of hand-spraying machines at reduced prices to small holders in localities where such machines were not readily procurable at reasonable prices, the provision, at cost price, of repair parts for spraying machines, and the repairing of machines.

The following table shows the number of spraying machines sold and repaired by the overseers and temporary demonstrators throughout the congested districts during 1911:—

	District	Machines Sold	Machines Repaired
Co.	Donegal, . . . . .	189	597
"	Mayo, . . . . .	431	420
"	Sligo, . . . . .	175	203
"	Roscommon, . . . . .	130	93
"	Leitrim, . . . . .	101	109
"	Galway, . . . . .	304	211
"	Clare, . . . . .	120	85
"	Kerry, . . . . .	74	118
"	West Cork, . . . . .	43	57
TOTAL,		1,567	1,893

The extent of the operations in connection with potato spraying during the past five seasons was as follows:—

Season	Machines Sold	Quantities of Spraying Materials Sold						Machines Repaired
		Sulphate of Copper			Washing Soda			
		T.	C.	Q.	T.	C.	Q.	
1907,	1,259	61	11	1	27	1	0	1,382
1908,	1,364	75	6	2	36	13	1	1,001
1909,	1,211	1	17	1	1	7	3	996
1910,	2,112	—			—			1,701
1911,	1,567	1	0	0	1	5	0	1,893
TOTAL,	7,513	139	15	0	66	7	0	6,973

In consequence of the stocking of copper sulphate and washing soda by local traders throughout the congested districts, it was found unnecessary for the Department to arrange for the supply of spraying materials, save on Clare Island.

The reduction in the number of machines sold during the past year is to be attributed chiefly to the unusually fine weather which prevailed throughout the summer retarding the appearance and checking the development of blight.

To overcome initial difficulties in the way of proper cultivation, and to encourage the use of agricultural implements by new holders on the estates in congested districts; recently settled by the Congested Districts Board or the

Estates Commissioners, the Department supplied to farmers on these estates, at three-fourths cost price, a limited number of ploughs, drill grubbers, harrows, etc., purchased from merchants in the several localities.

The number of implements thus sold is shown in the following table :—

Implement	Number Sold
Ploughs, . . . . .	83
Harrows, . . . . .	6
Drill Grubbers, . . . . .	39
Rollers, . . . . .	2
Mowers, . . . . .	60
Reaping attachments for Mowers, . . . . .	25

Arrangements have also been made to supply threshing machines under this scheme in the Castlereagh and Ardahan districts.

Syringes to the number of forty-eight for the treatment of contagious abortion in cattle were sold to holders of premium bulls in the west during the past year. The number of these instruments sold during the previous year was thirty-seven.

This scheme, particulars of which appeared in the Appendix to the Tenth Annual Report, was initiated in the year 1909-10, and was continued during the year under review. The following tables show the extent of the scheme and the districts now visited by the 27 veterinary surgeons :—

County	Headquarters of Veterinary Surgeon	Centres at which Dispensaries are held
Donegal . . . . .	Milford . . . . .	Tamny, Termon, and Carrigart.
Do. . . . .	Bundoran . . . . .	Cliffony and Ballintra.
Do. . . . .	Falcarragh . . . . .	Creelough, Duffanaghy, Burtonport, Dungloe and Gweedore.
Do. . . . .	Dunkineely . . . . .	Glencolumbkille, Carrick, Killybegs and Donegal.
Leitrim . . . . .	Manorhamilton . . . . .	Belcoo, Glencar, Creevailea (and Kiltyclogher.
Do. . . . .	Drumshambo . . . . .	Dowra, Keshcarrigan, Drumkeeran, Ballinamore and Ballylarnon.
Mayo . . . . .	Ballina . . . . .	Euskey, Ballycastle, Killala and Crossmolina.
Do. . . . .	Swinford . . . . .	Charleston, Foxford, Kilkelly, Aclare and Kiltimagh.
Do. . . . .	Westport . . . . .	Newport, Achill, Lisacorney, Louisburg, Mallaranny, Killavally and Ballycroy.
Do. . . . .	Belmullet . . . . .	Barnatra, Gweesala, Bangor, Poulathomas, Glenamoy and Blacksod.
Roscommon . . . . .	Boyle . . . . .	Gurteen and Ballaghaderreen.
Do. . . . .	Castlereagh . . . . .	Ular, Frenchpark and Ballinlough.
Galway . . . . .	Galway . . . . .	Spiddal and Oughterard.
Do. . . . .	Clifden . . . . .	Letterfrack, Maam, Costello, Leenane, Carna, Recess and Roundstone.
Clare . . . . .	Ennis . . . . .	Tulla, Tubber, Scarriff and Ennistymon.
Do. . . . .	Kilrush . . . . .	Labasheeda, Kilmihill, Liscasey and Kildysart.
Do. . . . .	do. . . . .	Carrigaholt Kilkee, Doonbeg and Miltown Malbay.



County	Headquarters of Veterinary Surgeon	Centres at which Dispensaries are held
Kerry . . .	Cahiriveen . . .	Glenbeigh, Portmagee, Waterville, Caherdaniel and Sneem.
Do. . . . .	Killarney . . .	Killorglin, Loebridge, Rathmore and Kenmare.
Do. . . . .	Listowel . . . .	Ballylongford and Causeway.
Do. . . . .	do. . . . .	Lisselton and Knocknagoshel.
Do. . . . .	Tralee . . . . .	Ardfert and Castlemaine.
Do. . . . .	do. . . . .	Castleisland and Kilflynn.
Do. . . . .	Dingle . . . . .	Anniscaul, Cloghane, Ballyferriter and Castlegregory.
Cork . . . . .	Skibbereen . . .	Leap, Toormore and Ballydehob.
Do. . . . .	Bantry . . . . .	Ballingeary, Ahakista, Kealkil, Drimoleague and Glengariff.
Do. . . . .	Castletownbere .	Adrigole, Eyries, Allihies and Lauragh.

The following return shows the number of cases treated under the scheme by each officer at the various dispensaries and at farmers' residences :—

County	Headquarters	No. of dispensaries	No. of cases treated at dispensaries	No. of visits paid to residences of small farmers
Donegal . . .	Milford . . . . .	3	122	66
Do. . . . .	Bundoran . . . .	2	43	33
Do. . . . .	Falcarragh . . .	5	369	394
Do. . . . .	Dunkineely . . .	4	217	288
Leitrim . . .	Manorhamilton .	4	45	37
Do. . . . .	Drumshambo . .	5	573	255
Mayo . . . .	Ballina . . . . .	4	638	121
Do. . . . .	Swinford . . . .	5	398	188
Do. . . . .	Westport . . . .	7	242	200
Do. . . . .	Belmullet . . . .	6	134	156
Roscommon .	Boyle . . . . .	2	239	15
Do. . . . .	Castleroa . . . .	3	120	72
Galway . . .	Galway . . . . .	2	89	32
Do. . . . .	Clifden . . . . .	7	233	421
Clare . . . .	Ennis . . . . .	4	268	10
Do. . . . .	Kilrush . . . . .	4	433	20
Do. . . . .	Do. . . . .	4	950	254
Kerry . . . .	Cahiriveen . . .	5	281	222
Do. . . . .	Killarney . . . .	4	214	48
Do. . . . .	Listowel . . . . .	2	48	32
Do. . . . .	Do. . . . .	2	228	67
Do. . . . .	Tralee . . . . .	2	23	11
Do. . . . .	Do. . . . .	2	29	14
Do. . . . .	Dingle . . . . .	4	70	61
Cork . . . .	Skibbereen . . .	3	121	62
Do. . . . .	Bantry . . . . .	5	41	7
Do. . . . .	Castletownbere .	4	141	77
TOTALS		104	6,309	3,163

The scheme as it becomes better known is being availed of more and more by the small farmers in the congested districts, though in one or two cases the people have not yet realised the benefits to be derived from taking advantage of the opportunities offered. It is hoped to extend the scheme, if funds so permit, that the cheap veterinary advice provided by the scheme may ultimately be available in every district in those counties scheduled as congested.

The experimental scheme in county Wexford was continued during the year with satisfactory results.

The scheme for encouraging improvement in poultry-keeping in 1910-11 (particulars of which appear at **POULTRY-KEEPING**, page 257 of the Appendices) was put into operation in every county in Ireland, with the exception of county Dublin. Thirty-five instructors were appointed, seventeen of whom were also employed for portion of the year in giving instruction in connection with the butter-making scheme.

With a view to improving the breeds of poultry, the committees again offered premiums for the distribution from approved poultry stations of sittings of hen, duck and goose eggs, and also for services effected by stock birds at turkey stations. The values of the premiums were the same as in last year, viz., £5 for hen or hen and duck stations, £2 for goose stations, and £2 for turkey stations.

The general duties of the instructors under the scheme included the delivery of lectures, the holding of classes, the visiting of farms, and the supervision of poultry stations.

The Department impressed upon the committees the necessity of the instructors paying particular attention to the work of visiting the homes of poultry-keepers, inspecting the poultry-runs, and giving practical advice on poultry matters generally. As a result of the attention paid to this part of their work the instructors made throughout the year 14,225 visits.

The scheme of tutorial and practical classes was put into operation by 26 county committees, viz., Armagh, Carlow, Cavan, Clare, Cork, Donegal, Galway, Kerry, Kildare, Kilkenny, King's, Londonderry, Longford, Louth, Meath, Monaghan, Queen's, Roscommon, Sligo, Tipperary, N.R., Tipperary, S.R., Tyrone, Waterford, Westmeath, Wexford and Wicklow. The instructor, when engaged holding classes at a particular centre, makes it her duty to visit the poultry-runs at the homes of the pupils, and gives advice as may be required. The syllabus of the subjects dealt with at these classes, and the list of equipment required, are set forth in detail in the scheme printed in the Appendices at page 262. During the past year the instructors delivered 531 lectures, at which there was an average attendance of 54 persons, and held 1,552 classes with an average attendance of 18 pupils.

The following table shows the progress of the work under this scheme during the past ten years :—

Year	Counties	No. of Meetings held	No. of Classes held	No. of Egg-Distributing Stations		Eggs Distributed Dozens	No. of Turkey Stations	No. of Goose Stations
				Hens only	Hens and Ducks			
1901-2	12	1,134	—	36	—	4,108	—	—
1902-3	22	2,231	—	220	—	18,040	—	—
1903-4	32	3,185	—	346	46	40,857	181	—
1904-5	30	2,662	—	333	129	49,191	328	—
1905-6	30	2,024	629	315	180	52,409	404	—
1906-7	30	1,367	892	303	205	51,378	460	68
1907-8	30	895	1,474	305	233	53,919	467	92
1908-9	31	677	1,402	328	261	63,471	497	130
1909-10	32	588	1,522	337	282	66,187	532	140
1910-11	32	531	1,552	310	274	65,790	589	184

The keeping of egg records by means of trap nests, which was commenced during 1909-10, was continued in the past year at 24 selected egg distribution stations. The trap nests and other requisites were supplied by the Department free of charge in the first instance on the understanding that the station-holders would keep for a period of two years a continuous record of the number of eggs laid by each hen from a given number of birds of approved pure breeds.

The following table contains particulars of the amounts paid by each county committee for premiums under the poultry scheme, 1910-11 :—

County	Hen and Duck Stations	Goose Stations	Turkey Stations
	£ s. d.	£ s. d.	£ s. d.
Antrim . . .	70 0 0	—	49 0 0
Armagh, . . .	85 0 0	10 0 0	60 0 0
Carlow, . . .	35 0 0	6 0 0	10 0 0
Cavan, . . .	89 18 1	18 15 6	50 0 0
Clare, . . .	35 0 0	5 0 0	16 14 0
Cork, . . .	257 0 7	33 6 8	74 16 0
Donegal, . . .	196 13 9	20 0 0	40 0 0
Down, . . .	120 10 0	16 0 0	58 0 0
Dublin, . . .	—	—	—
Fermanagh, . . .	100 0 0	7 16 8	34 0 0
Galway, . . .	98 2 6	18 0 0	67 4 0
Kerry, . . .	139 12 6	10 0 0	38 0 0
Kildare, . . .	64 11 3	4 0 0	19 6 0
Kilkenny, . . .	80 0 0	6 0 0	47 16 0
King's, . . .	49 3 9	6 0 0	20 0 0
Leitrim, . . .	24 9 3	10 0 0	44 0 0
Limerick, . . .	65 0 0	—	23 14 0
Londonderry, . . .	89 11 7	8 0 0	32 0 0
Longford, . . .	39 16 3	16 0 0	26 0 0
Louth, . . .	89 13 9	12 0 0	33 4 0
Mayo, . . .	132 6 10	25 6 8	34 4 0
Meath, . . .	91 7 6	10 0 0	60 0 0
Monaghan, . . .	75 0 0	10 0 0	40 0 0
Queen's, . . .	48 16 3	—	15 0 0
Roscommon, . . .	103 12 6	16 0 0	22 0 0
Sligo, . . .	70 0 0	9 16 8	20 0 0
Tipperary (N.R.), . . .	100 0 0	10 0 0	26 0 0
" (S.R.), . . .	74 10 0	20 0 0	28 0 0
Tyrone, . . .	89 18 4	16 0 0	39 18 0
Waterford, . . .	87 18 9	—	15 2 0
Westmeath, . . .	119 16 3	22 0 0	59 8 0
Wexford, . . .	92 1 3	10 0 0	40 0 0
Wicklow, . . .	70 0 0	4 0 0	14 4 0
Totals, 1911, . . .	2,884 10 11	360 2 2	1,157 10 0
" 1910, . . .	3,026 19 3	273 16 8	1,048 14 0
" 1909, . . .	2,899 19 6	254 3 4	974 14 0
" 1908, . . .	2,615 17 11	169 13 4	903 18 0

The regulations of the scheme of instruction in horticulture and bee-keeping are printed in the Appendices, page 269.

**HORTICULTURE AND BEE-KEEPING.** The scheme was adopted in 1910-11 by every county, except county Leitrim.

Thirty-nine instructors were employed during the year, of which thirty-two were qualified to give instruction in horticulture and bee-keeping, four were qualified in horticulture only, and three in bee-keeping only. In three counties separate instructors were employed for horticulture and for bee-keeping respectively.

Although an instructor's duties under this scheme are confined mainly to giving practical demonstrations in gardens, orchards, &c., in the planting, pruning, grafting, and spraying of trees, &c., they also include the delivery of lectures to a limited extent. During the year 307 such lectures were given at which there was an average attendance of 41, and the number of visits and demonstrations at gardens, orchards and selected plots amounted to 31,273.

The number of demonstration plots established in 1911 in connection with this scheme was 302 as compared with 286 in 1910. These plots are under the direct supervision of the horticultural instructor, and are periodically inspected by the Department. The plots are, as a rule, carefully cultivated by the holders, and are of considerable educational value in showing improved methods in the growing and cultivation of vegetables, fruit, and flowers.

It is gratifying to note that cottagers and others continue to take full advantage of the arrangements under which county committees purchase trees, etc., and re-sell them to approved applicants at cost price; and, as a result, tree-planting has been carried out on an extensive scale. As in previous years, the Department inspected the stocks of the principal Irish nurseries, and notified the several county committees in regard to the classes of trees approved at each nursery. The committees were thus in a position to supply reliable trees and plants to applicants.

The following figures indicate the extent to which trees were distributed under the foregoing arrangement during the year ended 30th September, 1911:—

Apples, .. ..	30,392
Pears, .. ..	934
Plums, .. ..	1,159
Damsons, .. ..	17
Cherries, .. ..	59
Gooseberries, .. ..	7,261
Currants, .. ..	5,947
Raspberries, .. ..	6,102
Other fruits, .. ..	3,407
Forest trees, .. ..	429,606
Other trees and shrubs, ..	131,085

The returns submitted to the Department in respect of 33 counties show that 279 cases of foul brood

**BEE PEST  
PREVENTION  
(IRELAND) ACT,  
1908.** were dealt with by the various local authorities. In the undermentioned 28 counties the county committees of agriculture, with the consent of the respective county councils, made provision for the payment of

compensation to bee-keepers for bees, appliances, &c., compulsorily destroyed under the provisions of the Act. Payments of compensation amounting in all to £31 17s. 6d. were recommended in fifteen counties.

County	Amount allocated for compensation £
<b>ULSTER :—</b>	
Antrim, . . . . .	15
Armagh, . . . . .	10
Cavan, . . . . .	20
Donegal, . . . . .	15
Down, . . . . .	30
Fermanagh, . . . . .	10
Londonderry, . . . . .	—
Monaghan, . . . . .	10
Tyrone, . . . . .	10
<b>MUNSTER :—</b>	
Clare, . . . . .	10
Cork, . . . . .	20
Kerry, . . . . .	5
Limerick, . . . . .	9
Tipperary, N.R., . . . . .	10
Tipperary, S.R., . . . . .	9
Waterford, . . . . .	—
<b>LEINSTER :—</b>	
Carlow, . . . . .	—
Dublin, . . . . .	—
Kildare, . . . . .	10
Kilkenny, . . . . .	20
King's, . . . . .	5
Longford, . . . . .	1
Louth, . . . . .	10
Meath, . . . . .	20
Queen's, . . . . .	5
Westmeath, . . . . .	5
Wexford, . . . . .	25
Wicklow, . . . . .	3
<b>CONNACHT :—</b>	
Galway, . . . . .	20
Leitrim, . . . . .	5
Mayo, . . . . .	5
Roscommon, . . . . .	—
Sligo, . . . . .	5
<b>TOTAL,</b>	<b>£322</b>

The committees of twenty-seven counties adopted the scheme of instruction in butter-making during the past year, and employed thirty-three instructors. Of these instructors, seventeen were also engaged during portion of the year giving instruction in poultry-keeping.

The committees of the counties Antrim, Armagh, Dublin, Fermanagh, Limerick and Sligo did not put the scheme into operation during the year 1911.

During the year the instructors made 6,510 visits to private dairies, delivered 152 lectures, and conducted 3,282 dairy classes in 260 centres, with an average attendance of eight pupils.

The following statement shows the number of counties in which instructors have been employed during each of the past ten years:—

1901-2,	..	..	..	4
1902-3,	..	..	..	11
1903-4,	—	..	..	18
1904-5,	..	..	..	22
1905-6,	..	..	..	24
1906-7,	..	..	..	24
1907-8,	..	..	..	24
1908-9,	..	..	..	26
1909-10,	..	..	..	26
1910-11,	..	..	..	27

A copy of the scheme will be found in the Appendices, page 267.

The scheme of prizes for cottages and small farms (printed in the appendices, page 248), was put into operation during 1911 in all counties with the exception of Antrim, Armagh, and Carlow. The instructors in agriculture acted as judges in districts other than those of which they had charge under the scheme of instruction in agriculture.

The Department were glad to observe entries from labourers in the cottage section are increasing each year.

The following table shows the number of administrative counties in which the scheme was in operation, the number of holdings entered for competition each year, and the number and the total value of the prizes awarded during the past ten years :—

Year	No. of Counties	No. of Entries	No. of Prizes Awarded	Amount Expended in Prizes
1902, . . .	8	—*	588	£ 1,046
1903, . . .	19	—*	1,066	1,972
1904, . . .	25	3,065	1,534	2,837
1905, . . .	27	3,146	2,008	3,476
1906, . . .	31	3,975	2,551	4,035
1907, . . .	31	3,905	2,501	4,287
1908, . . .	30	3,819	2,417	4,179
1909, . . .	28	4,004	2,507	4,796
1910, . . .	26	4,069	2,486	4,632
1911, . . .	30	4,600	2,758	5,048

\* Accurate figures cannot be given.

The committees of counties Cork and Meath again offered prizes for the best-kept tillage farms. There were 130 entries received in county Cork and twenty in county Meath for the prizes to the value of £519 10s. and £195 respectively.

The value of the prizes offered and awarded, etc., since the initiation of the scheme in 1907, is set forth in the following table :—

County	Year	Value of Prizes offered	No. of Entries received	Amount expended in Prizes
Cork, . . .	1907	£ 468	124	£ 461
	1908	468	210	468
	1909	444½	187	440
	1910	454½	126	444
	1911	519½	130	—*
Meath, . . .	1908	195	32	195
	1909	195	23	195
	1910	195	21	195
	1911	195	20	195

\* Not yet available.



The pioneer lectures on veterinary hygiene were continued during the year. Some sixteen counties were PIONEER LECTURES. visited by the lecturer, from twelve to twenty-four lectures being given in each county.

(b.) IMPROVEMENT OF LIVE STOCK.

With the exception of counties Sligo and Tyrone this scheme HORSE-BREEDING (see Appendices, page 230) was adopted in every county. In the case of county SCHEME. Tyrone, the committee provided funds for the awarding of premiums to stallions.

The following table shows the number of stallions accepted for entry in the Department's register for each year since 1901 :—

Year	Thorough- bred	Irish draught	Half- bred	Clydes- dale	Shire	Total
1901, . .	97	—	—	23	8	128
1902, . .	111	—	—	35	16	162
1903, . .	123	—	—	48	21	192
1904, . .	140	—	—	48	23	211
1905, . .	154	—	—	49	26	229
1906, . .	163	—	—	50	26	239
1907, . .	161	—	38	51	26	276
1908, . .	156	—	50	52	24	282
1909, . .	153	—	61	57	25	296
1910, . .	167	—	83	63	27	340
1911, . .	184	13	87	63	23	370

Particulars of the assistance rendered by the Department by means of loans and subsidies for the purchase of stallions during the past ten years are given in the following table :—

Year	Thorough-bred		Irish Draught		Half-bred		Clydesdale		Shire		Total	
	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies
1902,	1	5	—	—	—	—	4	3	—	1	5	9
1903,	6	6	—	—	—	—	2	1	1	—	9	7
1904,	11	12	—	—	—	—	1	1	—	—	12	13
1905,	9	7	—	—	—	—	1	1	1	1	11	9
1906,	7	8	—	—	—	—	1	1	—	—	8	9
1907,	4	3	—	—	2	1	—	—	—	—	6	4
1908,	5	3	—	—	11	10	3	3	2	2	21	18
1909,	15	9	—	—	14	7	2	1	—	—	31	17
1910,	8	5	—	—	16	16	1	—	1	—	26	21
1911,	20	15	1	—	10	10	3	1	—	—	34	26

The scheme of loans for the purchase of stallions will be found in the Appendices, page 243.

The arrangements made for the selection of mares for nominations were similar to those adopted in previous years.

The following table shows in respect of each of the past ten years (1) the total number of local exhibitions held for the purpose, (2) the number of mares selected, (3) the amount allocated for nominations, and (4) the amount actually expended :—

Year	No. of Local Exhibitions of Mares held	Number of Nominations of Mares					Amount allocated for Nominations	Amount expended for Nominations
		To Thorough-bred Stallions	To Irish Draught and Half-bred Stallions	To Shire Stallions	To Clydesdale Stallions	Total		
1902,	170	1,580	—	235	528	2,343*	£ 6,756	£ 5,831
1903,	180	1,651	—	285	658	2,694*	6,933	6,234
1904,	210	2,010	—	273	761	3,044*	8,371	7,158
1905,	217	2,436	—	281	758	3,475*	8,687	8,122
1906,	227	2,624	—	241	743	3,608*	8,838	8,324
1907,	227	2,325	295	218	695	3,533*	8,497	8,064
1908,	227	2,257	545	214	762	3,778*	8,642	8,092
1909,	223	1,992	645	198	733	3,568*	7,841	7,490
1910,	219	1,832	653	220	760	3,465*	7,515	7,392
1911,	229	2,844	1,203	252	1,234	5,533†	7,560	10,963‡

\* Number actually paid for. † Estimated number to be paid for.

‡ Estimated amount to be paid, which includes a sum of £3,948 provided from the Development Grant.

The special regulations for 1911 made by county committees in respect of the valuation of farmers eligible to exhibit mares for nominations were as under :—

Province and County	Limits of Valuation			
	Higher Valuation		Lower Valuation	
	Proportion of Nominations allocated	Valuation £	Proportion of Nominations allocated	Valuation £
<b>ULSTER.</b>				
Antrim, . . . . .	$\frac{1}{2}$	No limit	$\frac{1}{2}$	75
Armagh, . . . . .	No limit	—	—	—
Cavan, . . . . .	Valuation not to exceed £50	—	—	—
Donegal, . . . . .	$\frac{1}{2}$ for farmers under £20 ; $\frac{1}{2}$ between £20 and £150	—	$\frac{1}{2}$ between £10 and £20 ; $\frac{1}{2}$ between £20 and £150	—
Down, . . . . .	$\frac{1}{2}$	75	$\frac{1}{2}$	40
Fermanagh, . . . . .	$\frac{1}{2}$	150	$\frac{1}{2}$	50
Londonderry, . . . . .	$\frac{1}{2}$ under £20 ; $\frac{1}{2}$ between £20 and £40 ; $\frac{1}{2}$ £40 and over	—	—	—
Monaghan, . . . . .	$\frac{1}{2}$	100	$\frac{1}{2}$	30
Tyrone, . . . . .	—	—	—	—
<b>MUNSTER.</b>				
Clare, . . . . .	$\frac{1}{2}$	200	$\frac{1}{2}$	50
Cork, W.R., . . . . .	$\frac{1}{2}$	150	$\frac{1}{2}$	30
„ E.R., . . . . .	$\frac{1}{2}$	200	$\frac{1}{2}$	50
Kerry, . . . . .	Valuation not to exceed £100	—	—	—
Limerick, . . . . .	Valuation not to exceed £50	—	—	—
Tipperary, N.R., . . . . .	$\frac{1}{2}$	125	$\frac{1}{2}$	50
„ S.R., . . . . .	—	No limit	—	80
Waterford, . . . . .	$\frac{1}{2}$	200	$\frac{1}{2}$	75
<b>LEINSTER.</b>				
Carlow, . . . . .	$\frac{1}{2}$	150	$\frac{1}{2}$	50
Dublin, . . . . .	$\frac{1}{2}$	300	$\frac{1}{2}$	100
Kildare, . . . . .	$\frac{1}{2}$	No limit	$\frac{1}{2}$	100
Kilkenny, . . . . .	$\frac{1}{2}$	100	$\frac{1}{2}$	50
King's, . . . . .	$\frac{1}{2}$	75	$\frac{1}{2}$	40
Longford, . . . . .	$\frac{1}{2}$	300	$\frac{1}{2}$	50
Louth, . . . . .	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Meath, . . . . .	$\frac{1}{2}$	150	$\frac{1}{2}$	50
Queen's, . . . . .	$\frac{1}{2}$	100	$\frac{1}{2}$	40
Westmeath, . . . . .	$\frac{1}{2}$	100	$\frac{1}{2}$	50
Wexford, . . . . .	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
Wicklow, . . . . .	$\frac{1}{2}$	No limit	$\frac{1}{2}$	50
<b>CONNACHT.</b>				
Galway, . . . . .	$\frac{1}{2}$	100	$\frac{1}{2}$	30
Leitrim, . . . . .	$\frac{1}{2}$	No limit	$\frac{1}{2}$	20
Mayo, . . . . .	$\frac{1}{2}$	30	$\frac{1}{2}$	15
Rooscommon, . . . . .	$\frac{1}{2}$	50	$\frac{1}{2}$	30
Sligo, . . . . .	Valuation not to exceed £25.	—	—	—

The following table shows the extent to which the scheme was availed of by farmers in each of the counties concerned:—

Province and County	Number of Local Exhibitions arranged by County Committee	Number of Mares competing for free nominations	Number of Mares declared suitable by Judge and Veterinary Surgeon for free nominations.		
			Se-lected	Re-served	Total
ULSTER.					
Antrim, . . . .	6	658	260	68	328
Armagh, . . . .	3	166	71	10	81
Cavan, . . . .	9	447	134	48	182
Donegal, . . . .	11	504	189	54	241
Down, . . . .	11	443	206	50	256
Fermanagh, . . . .	6	231	85	25	110
Londonderry, . . . .	4	413	134	38	172
Monaghan, . . . .	6	338	140	37	177
Tyrone, . . . .	—	—	—	—	—
Totals for Ulster, . .	56	3,200	1,217	330	1,547
MUNSTER.					
Clare, . . . .	8	926	297	69	366
Cork, . . . .	18	1,840	371	165	536
Kerry, . . . .	8	972	285	116	401
Limerick, . . . .	8	465	223	77	300
Tipperary, N.R., . .	4	605	208	34	242
„ S.R., . . . .	8	904	452	51	503
Waterford, . . . .	6	480	192	41	239
Totals for Munster, . .	60	6,192	2,034	553	2,587
LEINSTER.					
Carlow, . . . .	4	190	45	28	73
Dublin, . . . .	12	427	222	55	277
Kildare, . . . .	5	280	88	38	126
Kilkenny, . . . .	8	516	156	52	208
King's, . . . .	6	261	75	42	117
Longford, . . . .	3	260	87	25	112
Louth, . . . .	3	178	62	15	77
Meath, . . . .	8	417	172	38	210
Queen's, . . . .	5	326	112	36	148
Westmeath, . . . .	8	492	126	50	176
Wexford, . . . .	4	515	223	60	283
Wicklow, . . . .	7	449	208	67	275
Totals for Leinster, . .	73	4,311	1,576	506	2,082
CONNACHT.					
Galway, . . . .	11	659	248	40	288
Leitrim, . . . .	7	226	90	39	129
Mayo, . . . .	9	614	178	87	265
Roscommon, . . . .	9	396	140	40	180
Sligo, . . . .	4	188	34	9	43
Totals for Connacht, . .	40	2,083	690	215	905
Totals for all Ireland, .	229	15,786	5,517	1,604	7,121

There were 15,786 mares inspected (*i.e.*, more than 46 per cent. over the number competing in 1910), of which 8,054 (or 47 per cent. more than in 1910) were passed by the judges as eligible for nominations, but of these the veterinary surgeons rejected 933 as unsound.

Over 70 per cent. of the nominations awarded were given to mares six years of age and under.

With the exception of counties Dublin, Longford, Limerick and Meath, the county committees fixed the nomination fee at £2.

The experimental scheme adopted by the Tyrone county committee two years ago was continued on the same lines in 1911. The committee selected twelve registered stallions standing for service in the county, *viz.*: two thoroughbreds, seven clydesdales, two shire and one half-bred. A premium of £40 was offered for each of the thoroughbred sires in consideration of serving forty mares, and £30 for the other breeds for the service of forty-five mares each. The mares, which were the property of farmers in the county, each of whose valuation did not exceed £100, were not selected at special exhibitions nor subjected to the veterinary examination required under the Department's general scheme.

The service fee payable in the case of thoroughbred sires was £1 per mare and in all other cases 10s. A total of 483 mares were served under this special scheme, *viz.*: 61 by thoroughbred stallions and 422 by the others.

The amounts paid in 1911 to stallion owners were as follows:—

	£	s.	d.
Full premium for one thoroughbred stallion . .	40	0	0
Part premium for one thoroughbred stallion . .	21	0	0
Full premiums for six clydesdale stallions . .	180	0	0
Part premium for one clydesdale stallion . .	28	0	0
Full premium for two shire stallions . .	60	0	0
Part premium for one half-bred stallion . .	13	6	8
	<hr/>		
	£342	6	8

The following table indicates the extent to which the Department made special provision in 1911 for the congested areas by

placing stallions in remote districts, at a nominal service fee :—

County	Breed of Stallion	Place of Location
Donegal, . . . .	Clydesdale, . . . .	Falcarragh.
Do., . . . .	do, . . . .	Dungloe
Do., . . . .	Half-bred, . . . .	Arranmore Island.
Galway, . . . .	*Welsh Cob, . . . .	Carnakelly.
Do., . . . .	Half-bred, . . . .	Carraroe.
Kerry, . . . .	Thoroughbred, . . . .	Kenmare.
Do., . . . .	*Welsh Cob, . . . .	Sneem.
Do., . . . .	do., . . . .	Glencar.
Leitrim, . . . .	Pony, . . . .	Mohill.
Mayo, . . . .	Half-bred, . . . .	Achill Sound.
Do., . . . .	do., . . . .	do.
Do., . . . .	do., . . . .	Belmullet.
Do., . . . .	*Welsh Cob, . . . .	Clare Island.

Of the colts purchased in previous years fifteen were registered as stallions during the year under review—the remainder having been sold as geldings.

*Development Grant.*—In November, 1910, on the recommendation of the Development Commissioners, His Majesty's Treasury decided to place at the disposal of the Department additional funds for the purpose of enabling them to extend their existing scheme. They accordingly made a supplementary grant of £4,000 in respect of the financial year ending 31st March, 1911, and intimated that a sum of £10,000 would be given to the Department for a like purpose during the financial year 1911-12. This latter sum was roughly apportioned as follows :—(a) £4,000 in connection with the purchase of stallions; (b) £4,000 for additional nominations of mares; and (c) £2,000 for an Irish Draught Horse scheme.

(a) The Department applied part of the foregoing grant, supplemented by aid from the Endowment Fund, towards the cost of purchasing stallions and colts during the agricultural year ended 30th September, 1911, as follows:—Up to the 31st March, 1911, the sum of £4,086 was spent on the purchase of thirteen sires, and between the 1st April and 30th September, 1911, eight sires, costing £1,579, and forty-five colts, costing £1,935, were purchased. Since September, 1911, three sires, costing £1,338, have been acquired. These three animals, however, properly belong to the agricultural year 1911-12 and they will be accounted for in the Report for that year.

(b) Additional nominations, of the value of £2 and £3 respectively, were provided in thirty-one counties to the extent of nearly fifty per cent. of what was already available from the committees' joint funds. In the case of county Tyrone the proportion granted to that county was applied in extending the existing experimental scheme of premiums for stallions, and in county Sligo, which had not adopted a horse scheme in 1910 or 1911, the amount of the grant was calculated

\* Formerly the property of the Congested Districts Board.

on the amount the committee had allocated for horse breeding in 1909. Out of £4,000 earmarked from the Development Grant for the purpose of awarding extra nominations, the Department allocated amongst the various county committees a sum of £3,948; and this, together with the sum of £7,850 (which includes £290 in county Tyrone for premiums to stallions), already provided from the joint fund, represented a total of £11,798 administered by the various county committees, during the past year, on horse-breeding in Ireland, out of which thirty-two county committees awarded a total of 5,533 nominations, and the Tyrone committee expended £342 6s. 8d. on premiums to twelve registered stallions. It would appear, from the reports furnished by the judges appointed by the Department to select mares for the foregoing nominations that, without having to reduce their usual standard, they experienced no difficulty in selecting a sufficient number of mares of the required merit to take up the full number of nominations available in each county.

(c) A scheme for encouraging the breeding of Irish draught horses, for which a sum of £2,000 was set aside, was put into operation early in the year. (For particulars of scheme see page 286 of the Appendices.) The Department fixed sixty centres for exhibitions of mares, and in all 5,040 mares were shown at these centres. Of this number, 264 were selected as eligible for prizes and for registration.

During the course of the inspection of mares, 109 stallions purporting to be of the Irish draught type were submitted by their owners to the Department's judges, but of these only seven were reported as suited for the requirements of the scheme. Six of the stallions already on the Department's register were also approved as Irish draught sires, thus making in all thirteen registered stallions available for the service of Irish draught mares. Two hundred and forty-four of the 264 mares selected were served during the season by these stallions. One of these sires stood for service in each of the counties:—Carlow, Clare, Cork, Down, Kildare, Limerick, Monaghan, Queen's, Tipperary, Westmeath, and Wexford, whilst two were available in county Kilkenny.

Arrangements were made by the Department with eleven of the stallion owners to keep the mares during service and for the usual number of trials afterwards. All expenses, i.e., service fees, carriage of mares to and from stud, and keep of mares were defrayed by the Department. In order to provide for two districts, viz.: one in the north and one in the south, where it was impossible to find Irish draught stallions of the proper type, the Department purchased two of the registered Irish draught stallions and located them in charge of their own grooms, at Clones and Limerick.

In order to provide for poor districts in which donkeys are largely used, the Department located forty-nine stallion asses with caretakers, who were held responsible for the proper care and treatment of the animals while in their possession.

ASSES.

The asses were placed as follows:—

County	District in which Located	County	District in which Located
Cavan, .	Ballinagh.	Kerry (contd.)	Ballinaskelligs.
Cork, .	Skibbereen (two).	Do., .	Ballylongford.
Do., .	Macroom (two).	Leitrim, .	Annaghmore.
Donegal, .	Orbeg.	Do., .	Mohill.
Do., .	Bruckless.	Do., .	Fenagh.
Do., .	Bundoran.	Do., .	Ballinamore.
Do., .	Arranmore Island.	Mayo, .	Ballina.
Fermanagh, .	Florencecourt.	Do., .	Westport (two).
Galway, .	Woodlawn.	Do., .	Killala.
Do., .	Craughwell.	Do., .	Kilkelly.
Do., .	Abbey.	Do., .	Inishturk Island.
Do., .	Williamstown <sup>1</sup>		
Do., .	Ballygar,	Roscommon, .	Donamon.
Do., .	Ballymacward,	Do., .	Athleague.
Do., .	Kinvara.	Do., .	Ballaghaderreen.
Do., .	Tuam.	Do., .	Ballydangan.
Do., .	Athenry.	Do., .	Kilroosky.
Kerry, .	Mastergeehy.	Do., .	Athlone (two).
Do., .	Caherdaniel.	Do., .	Ballinagore.
Do., .	Valentia Island.		
Do., .	Castlegregory.	Sligo, .	Dromard.
Do., .	Ballyheigue.	Do., .	Coolaney.
Do., .	Lixnaw.	Do., .	Castleblawin.
Do., .	Tuasist.		

This scheme, a copy of which is printed in the Appendices, page 286, was adopted in 1911 by every county CATTLE-BREEDING committee. The value of the premium for Kerry, Dexter, Galloway, and Registered Dairy bulls was fixed at £10, whilst for other approved breeds the committees were empowered to determine the value of the premium between the limits of £10 and £15. In Antrim the premium was fixed at £12 for all breeds, in Longford at £15 for shorthorns, and £12 10s. for other breeds, and in Roscommon at £15 for shorthorns, and £12 for other breeds. All the remaining committees awarded premiums of £15 each.

The following table shows the number of loans granted in each of the past ten years for the purchase of bulls.

Year	No. of Loans granted for the purchase of bulls.			
1902, .. .. .	..	..	..	86
1903, .. .. .	..	..	..	105
1904, .. .. .	..	..	..	122
1905, .. .. .	..	..	..	147
1906, .. .. .	..	..	..	185
1907, .. .. .	..	..	..	181
1908, .. .. .	..	..	..	140
1909, .. .. .	..	..	..	174
1910, .. .. .	..	..	..	209
1911, .. .. .	..	..	..	213



The following table shows by breeds how the bulls sold under the loan scheme in 1911 were distributed :—

County	Short-horn	Aberdeen Angus	Hereford	Galloway	Registered Dairy	Kerry	Total
Carlow, . . . . .	1	—	—	—	—	—	1
Cavan, . . . . .	2	—	2	—	—	—	4
Clare, . . . . .	8	1	—	—	—	—	9
Cork, . . . . .	12	4	—	—	1	1	18
Donegal, . . . . .	14	11	—	4	—	—	29
Down, . . . . .	3	1	—	—	—	—	4
Fermanagh, . . . . .	2	1	—	—	—	—	3
Galway, . . . . .	12	2	3	4	—	—	21
Kerry, . . . . .	7	20	—	—	—	5	32
Kildare, . . . . .	2	1	—	—	—	—	3
Kilkenny, . . . . .	10	1	—	—	—	—	11
King's, . . . . .	4	—	1	—	—	—	5
Leitrim, . . . . .	1	5	1	—	—	—	7
Limerick, . . . . .	1	—	—	—	1	—	2
Longford, . . . . .	1	—	—	—	—	—	1
Louth, . . . . .	1	—	—	—	2	—	3
Mayo, . . . . .	6	9	—	—	—	—	15
Meath, . . . . .	—	—	1	—	—	—	1
Monaghan, . . . . .	1	—	—	—	—	—	1
Queen's, . . . . .	4	3	—	—	—	—	7
Roscommon, . . . . .	3	1	2	—	—	—	6
Sligo, . . . . .	1	6	—	—	—	—	7
Tipperary, . . . . .	3	4	1	—	2	—	10
Tyrone, . . . . .	1	—	—	—	—	—	1
Waterford, . . . . .	1	1	—	—	—	—	2
Westmeath, . . . . .	—	—	1	—	—	—	1
Wexford, . . . . .	3	1	—	—	—	—	4
Wicklow, . . . . .	4	1	—	—	—	—	5
	108	73	12	8	6	6	213

During the past three years the county committees allocated for, and actually expended upon, premiums for bulls the following amounts :—

Year	Amount allocated	Amount expended
1909, . . . . .	£13,287	£11,967
1910, . . . . .	13,302	12,221
1911, . . . . .	13,520	12,613*

Provision was made by the committees for the award of 929 premiums in 1911. There were 715 bulls which held premiums in 1910 eligible to compete for premiums in 1911. Local exhibitions were held at 434 centres, at which 553 of these 715 animals were shown and examined by the Department's inspectors. Of this number, 546 were considered suitable for the renewal of premiums in 1911, but only 528 were actually awarded premiums, the others being for various reasons withdrawn.

Applicants were selected by the county committees to take up the balance of the premiums available.

Ninety-three per cent. of the premiums provided for were actually awarded. In Ulster, 98 per cent. ; in Leinster, 96 per cent. ; in Connacht, 92 per cent. ; and in Munster, 81 per cent. of the total number of bulls for which provision was made were procured.

\* Estimated.

The following table shows, by provinces and counties, the distribution of premium bulls in 1911 :—

Province and County	Number of Premiums provided by County Committee for 1911	Number of Bulls continued from 1910	Number of Bulls provisionally awarded Premiums for first time in 1911	Total Number of Bulls approved for Premiums in 1911
<b>ULSTER :</b>				
Antrim, . . . . .	63	31	31	62
Armagh, . . . . .	31	11	20	31
Cavan, . . . . .	28	22	6	28
Donegal, . . . . .	37	19	18	37
Down, . . . . .	67	38	28	66
Fermanagh, . . . . .	26	9	17	26
Londonderry, . . . . .	34	17	15	32
Monaghan, . . . . .	22	8	14	22
Tyrone, . . . . .	50	28	21	49
Totals for Ulster, . . . . .	358	183	170	353
<b>MUNSTER :</b>				
Clare, . . . . .	20	14	5	19
Cork, . . . . .	65	37	20	57
Kerry, . . . . .	30	11	15	26
Limerick, . . . . .	35	7	4	11
Tipperary (N.R.), . . . . .	17	11	6	17
Tipperary (S.R.), . . . . .	17	10	7	17
Waterford, . . . . .	10	7	3	10
Totals for Munster, . . . . .	194	97	60	157
<b>LEINSTER</b>				
Carlow, . . . . .	11	8	2	10
Dublin, . . . . .	15	12	3	15
Kildare, . . . . .	29	11	13	24
Kilkenny, . . . . .	31	19	12	31
King's, . . . . .	18	12	6	18
Longford, . . . . .	9	7	2	9
Louth, . . . . .	16	7	5	12
Meath, . . . . .	31	22	9	31
Queen's, . . . . .	17	10	7	17
Westmeath, . . . . .	30	23	7	30
Wexford, . . . . .	27	16	11	27
Wicklow, . . . . .	18	14	4	18
Totals for Leinster, . . . . .	252	161	81	242
<b>CONNACHT :</b>				
Galway, . . . . .	37	19	11	30
Leitrim, . . . . .	15	11	4	15
Mayo, . . . . .	26	16	9	25
Roscommon, . . . . .	23	17	4	21
Sligo, . . . . .	24	24	—	24
Totals for Connacht, . . . . .	125	87	28	115
<b>Totals for Ireland, . . . . .</b>	<b>929</b>	<b>528</b>	<b>339</b>	<b>867</b>

TABLE showing the ages and breeds of bulls selected for and awarded premiums under the scheme as administered by the county committees during each of the past ten years :—

Year	Ages				Breeds				Total No. of Bulls awarded Premiums
	Year-lings	Two-year-olds	Three-year-olds	Four-year-olds	Short-horn	Aberdeen Angus	Hereford	Other Breeds	
1902, .	292	132	—	—	337	52	26	9	424
1903, .	402	216	—	—	473	78	58	9	618
1904, .	334	315	85	—	557	99	63	15	734
1905, .	276	299	186	34	599	104	68	24	795
1906, .	302	251	196	72	617	117	67	20	821
1907, .	282	281	178	72	604	122	61	26	813
1908, .	268	267	205	60	600	123	61	16	800
1909, .	295	247	200	70	579	134	78	21	812
1910, .	324	285	164	65	578	159	75	26	838
1911, .	305	310	202	50	585	176	75	31	867*

\* Number of premiums provisionally awarded.

The following table shows how the premiums were distributed among the breeds selected by the county committees to stand for premiums in 1911 :—

County	Short-horn	Aberdeen Angus	Hereford	Galloway	Kerry	Registered Dairy	Totals
ULSTER :							
Antrim, . . . . .	55	1	—	3	—	3	62
Armagh, . . . . .	30	1	—	—	—	—	31
Cavan, . . . . .	20	3	5	—	—	—	28
Donegal, . . . . .	23	11	—	3	—	—	37
Down, . . . . .	53	13	—	—	—	—	66
Fermanagh, . . . . .	14	11	—	—	—	1	26
Londonderry, . . . . .	27	1	—	—	—	4	32
Monaghan, . . . . .	22	—	—	—	—	—	22
Tyrone, . . . . .	39	8	—	1	—	1	49
Totals for Ulster, . . . . .	283	49	5	7	—	9	353
MUNSTER :							
Clare, . . . . .	16	3	—	—	—	—	19
Cork, . . . . .	45	11	—	—	—	1	57
Kerry, . . . . .	7	17	—	—	2	—	26
Limerick, . . . . .	7	—	—	—	—	4	11
Tipperary (N.R.), . . . . .	11	4	2	—	—	—	17
Tipperary (S.R.), . . . . .	8	3	3	—	—	3	17
Waterford, . . . . .	6	4	—	—	—	—	10
Totals for Munster, . . . . .	100	42	5	—	2	8	157

The following table shows how the premiums were distributed among the breeds selected by the county committees to stand for premiums in 1911 (*continued*):—

County	Short-horn	Aberdeen Angus	Hereford	Galloway	Kerry	Registered Dairy	Total.
<b>LEINSTER :</b>							
Carlow, . . . . .	4	4	—	—	—	2	10
Dublin, . . . . .	7	4	4	—	—	—	15
Kildare, . . . . .	18	3	3	—	—	—	24
Kilkenny, . . . . .	29	2	—	—	—	—	31
King's, . . . . .	12	3	3	—	—	—	18
Longford, . . . . .	3	3	3	—	—	—	9
Louth, . . . . .	8	2	2	—	—	—	12
Meath, . . . . .	20	3	8	—	—	—	31
Queen's, . . . . .	10	4	3	—	—	—	17
Westmeath, . . . . .	6	1	23	—	—	—	30
Wexford, . . . . .	25	2	—	—	—	—	27
Wicklow, . . . . .	9	9	—	—	—	—	18
Totals for Leinster, . . . . .	151	40	49	—	—	2	242
<b>CONNACHT :</b>							
Galway, . . . . .	22	2	5	1	—	—	30
Leitrim, . . . . .	3	11	1	—	—	—	15
Mayo, . . . . .	10	13	—	2	—	—	25
Roscommon, . . . . .	7	5	9	—	—	—	21
Sligo, . . . . .	9	14	1	—	—	—	24
Totals for Connacht, . . . . .	51	45	16	3	—	—	115
Totals for Ireland, . . . . .	585	176	75	10	2	19	867

The following is a summary of the regulations for 1911 made by each county committee in regard to qualifications of cow-owners and amount of service fee :—

Province and County	Qualification of cow owners as to valuation and service fee as fixed by County Committees
<b>ULSTER.</b>	
Antrim, . . . .	100. 1/- fee in all cases.
Armagh, . . . .	20 for 1/- fee. Unlimited for 2/6 fee.
Cavan, . . . .	50. 1/- fee in all cases.
Donegal, . . . .	£150. In Congested Districts three-fourths of the prescribed number of cows to belong to farmers under £20 valuation. 1/- fee in all cases.
Down, . . . .	£40 for 1/- fee. £75 for 2/6 fee.
Fermanagh, . . . .	£15 for 1/- fee. £100 for 2/6 fee.
Londonderry, . . . .	No limit. 1/- fee in all cases.
Monaghan, . . . .	£40 for 1/- fee. £100 for 2/6 fee.
Tyrone, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
<b>MUNSTER.</b>	
Clare, . . . .	£75. 1/- fee in all cases.
Cork, . . . .	£150 in West Riding and £200 in East Riding; 1/- fee in all cases
Kerry, . . . .	£20 for 1/- fee. £100 for 2/6 fee.
Limerick, . . . .	£30 for 1/- fee. Unlimited for 2/6 fee.
Tipperary, N.R., . . . .	£30 for 1/- fee. £100 for 2/6 fee.
Tipperary, S.R., . . . .	£30 for 1/- fee. £80 for 2/6 fee.
Waterford, . . . .	£50 for 1/- fee. £150 for 2/6 fee.
<b>LEINSTER.</b>	
Carlow, . . . .	£100 for 1/- fee. £200 for 2/6 fee.
Dublin, . . . .	No limit. 1/- fee in all cases.
Kildare, . . . .	£75 for 1/- fee. £150 for 2/6 fee.
Kilkenny, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
King's, . . . .	£100. 1/- fee in all cases.
Longford, . . . .	£100. 1/- fee in all cases.
Louth, . . . .	No limit. 1/- fee in all cases.
Meath, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
Queen's, . . . .	£40 for 1/- fee. £100 for 2/6 fee.
Westmeath, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
Wexford, . . . .	£100. 1/- fee in all cases.
Wicklow, . . . .	£100 for 1/- fee.
<b>CONNACHT.</b>	
Galway, . . . .	£30 for 1/- fee. £100 for 2/6 fee.
Leitrim, . . . .	£30 for 1/- fee. Unlimited for 2/6 fee.
Mayo, . . . .	£15. 1/- fee in all cases.
Rooscommon, . . . .	£30. 1/- fee in all cases.
Sligo, . . . .	£25. 1/- fee in all cases.

The Department supplemented the cattle-breeding scheme, as administered by the committees of counties containing congested areas, by placing a number of bulls for service in congested districts. Particulars of the terms on which such bulls are placed are given at pages 48 and 49 of the Ninth Annual Report.

The following figures show the extent of the supplemental aid given by the Department in this manner during 1911 :—

County	No. of Special Premiums in 1911	No. of Bulls sold at reduced prices during 1911	No. of Bulls sold at reduced prices in previous years and retained for service in 1911	Total
Clare, . . .	7	—	—	7
Cork, . . .	13	—	4	17
Donegal, . . .	38	—	7	45
Galway, . . .	18	11	17	46
Kerry, . . .	38	—	6	44
Leitrim, . . .	12	—	—	12
Mayo, . . .	23	11	13	47
Roscommon, . . .	9	—	—	9
Sligo, . . .	10	—	—	10
Totals, . . .	168	22	47	237

The figures for each year since 1904, when the Department's operations were first extended to congested districts, are given in the following table :—

Year	Number of Special Premiums granted by the Department for Congested Districts	Number of Bulls sold at reduced prices to residents in Congested Districts
1904, . . .	8	—
1905, . . .	33	—
1906, . . .	51	25
1907, . . .	81	30
1908, . . .	95	31
1909, . . .	106	27
1910, . . .	133	35
1911, . . .	168	22

There were thus, in addition to 867 bulls standing under the county schemes, 237 animals placed under special arrangements, making a total of 1,104 bulls (i.e., 51 more than 1910) standing in Ireland under the cattle-breeding scheme in the season 1911.

Since the inception of this scheme in 1906, 685 cows have been accepted as suitable for entry in the register of dairy cattle. Of this number, 53 are DAIRY CATTLE. of the Kerry type.

In 1911, 561 cows (including 90 Kerry cows) were entered for inspection with a view to provisional

selection for registration. Of these, 503 (including 74 Kerries) were selected, and 9 were not presented for inspection. The remaining 49 were rejected as unsuitable. The Department, finding that comparatively few of the cows offered for registration in past years have been pure-bred, issued a circular to a number of breeders of pure-bred Shorthorn cattle directing attention to the advantages to be derived from the keeping of milk records, and as a result 118 pure-bred Shorthorn cows were offered for inspection and provisionally selected for registration in 1911.

A copy of the scheme is printed at page 282 of the Appendices.

The regulations of the swine-breeding scheme are printed at page 240 of the Appendices.

Boars which held premiums for the first time in 1910 were eligible for inspection with a view to being awarded second year premiums in 1911.

Such boars were inspected at the same centres as bulls and all those presented for inspection, viz., 164, were passed as suitable for premiums; of these, 161 stood for service in 1911. The county committees elected applicants to take up the balance of the premiums.

The Department during the past year, on behalf and at the request of applicants selected to keep premium boars, purchased from Irish breeders 161 boars suitable for the purposes of the scheme.

The following is a summary of the operations of the scheme during the past ten years:—

Year	Money allocated by County Committees for Boar Premiums	Money expended by County Committees for Boar Premiums	Number of Premiums awarded by County Committees	Number of Special Premiums provided by Department for Congested Districts	Total number of Boars standing in Ireland during Service Season
1901, .	£ 2,395	£ 752	151	—	151
1902, .	2,685	726	154	—	154
1903, .	2,530	879	181	—	181
1904, .	2,070	624	129	—	129
1905, .	1,740	840	205	10	215
1906, .	1,538	1,141	269	23	292
1907, .	1,618	1,171	287	51	338
1908, .	1,870	1,146	281	49	330
1909, .	1,700	1,252	310	49	359
1910, .	1,894	1,419	336	80	416
1911, .	1,798	1,663*	397*	98*	495*

\* Estimated

The number of premiums awarded by each county committee was as follows :—

County	No. of First year pre- miums	No. of Second year pre- miums	Large White Yorks	Large Blacks	White Ulster	Total
<b>ULSTER.</b>						
Antrim, . . . . .	7	4	—	—	11	11
Armagh, . . . . .	10	3	—	4	9	13
Cavan, . . . . .	10	4	1	—	13	14
Donegal, . . . . .	7	4	2	1	8	11
Down, . . . . .	13	2	—	1	14	15
Fermanagh, . . . . .	5	2	2	—	5	7
Londonderry, . . . . .	7	6	2	—	11	13
Monaghan, . . . . .	7	4	—	—	11	11
Tyrone, . . . . .	10	2	1	—	11	12
Totals for Ulster,	76	31	8	6	93	107
<b>MUNSTER.</b>						
Clare, . . . . .	9	3	12	—	—	12
Cork, . . . . .	16	7	23	—	—	23
Kerry, . . . . .	10	9	19	—	—	19
Limerick, . . . . .	5	—	5	—	—	5
Tipperary (N.R.), . . . . .	4	9	13	—	—	13
Tipperary (S.R.), . . . . .	5	1	6	—	—	6
Waterford, . . . . .	—	—	—	—	—	—
Totals for Munster,	49	29	78	—	—	78
<b>LEINSTER.</b>						
Carlow, . . . . .	4	1	3	1	1	5
Dublin, . . . . .	4	—	4	—	—	4
Kildare, . . . . .	6	3	7	—	2	9
Kilkenny, . . . . .	6	9	15	—	—	15
King's, . . . . .	5	10	14	1	—	15
Longford, . . . . .	6	2	5	3	—	8
Louth, . . . . .	4	3	3	—	4	7
Meath, . . . . .	2	3	4	1	—	5
Queen's, . . . . .	4	9	13	—	—	13
Westmeath, . . . . .	3	4	4	3	—	7
Wexford, . . . . .	11	13	16	5	3	24
Wicklow, . . . . .	3	2	5	—	—	5
Totals for Leinster,	58	59	93	14	10	117
<b>CONNACHT.</b>						
Galway, . . . . .	16	14	29	1	—	30
Leitrim, . . . . .	4	3	3	4	—	7
Mayo, . . . . .	18	8	26	—	—	26
Rosecommon, . . . . .	10	6	13	3	—	16
Sligo, . . . . .	5	11	15	—	1	16
Totals for Connacht,	53	42	86	8	1	95
Totals for Ireland,	236	161	265	28	104	397



In addition to the boars in respect of which premiums were payable by the county committees, the Department arranged for the payment, out of their own funds, of premiums for ninety-eight boars standing for service in counties containing congested districts.

The following table shows the number of such boars located in each of the counties concerned during 1911 :—

County	No. of First year premiums value £5	No. of Second year premiums value £3	Total
Clare, . . .	5	2	7
Cork, . . .	3	3	6
Donegal, . . .	7	2	9
Galway, . . .	9	9	18
Kerry, . . .	7	9	16
Leitrim, . . .	2	—	2
Mayo, . . .	14	10	24
Roscommon, . . .	5	3	8
Sligo, . . .	6	2	8
Totals, . . .	58	40	98

The committees of counties Down and Tyrone again made provision for the location of rams in sheep-breeding districts in those counties, and for this purpose they purchased ten and eight rams respectively.

The following shows the number of rams distributed by the Department at reduced prices to residents in congested districts during the past seven years :—

Year.	No. of Rams.
1905, .. ..	15
1906, .. ..	79
1907, .. ..	117
1908, .. ..	96
1909, .. ..	102
1910, .. ..	93
1911, .. ..	100

Provision was made for awarding prizes for sheep at all live stock shows, other than shows confined to horses, subsidised by county committees.

Particulars of the scheme of subsidies to shows will be found in the Appendices at page 246.

**SUBSIDIES TO SHOWS.** It will be observed from the regulations that show societies applying for grants are required to submit their applications to the county committees early in February each year, and to furnish

details in regard to their financial position and operations. In previous years considerable difficulty has been experienced in obtaining this information, but the Department are pleased to record a considerable improvement in this respect during the year 1911.

No local competitions in poultry-trussing, butter-making, etc., were held in 1911, otherwise than in conjunction with properly organised shows carried out under the auspices of subsidised agricultural societies.

The following table shows the progress of the scheme since its inception :—

Year	Subsidies granted to Shows		Skilled Labour Competitions (Ploughing Matches, etc.)		Local Competitions (Poultry Trussing, Butter-making, etc.)	
	Number	Amount	Number	Amount	Number	Amount
		£ s. d.		£ s. d.		£ s. d.
1901, . . .	61	4,384 4 9	—	—	—	—
1902, . . .	81	4,472 8 6	—	—	—	—
1903, . . .	121	6,233 1 11	—	—	—	—
1904, . . .	123	6,384 14 0	—	—	10	49 2 6
1905, . . .	126	6,295 16 6	—	—	56	106 10 10
1906, . . .	147	6,728 18 7	16	117 15 0	50	109 8 5
1907, . . .	142	6,876 15 0	34	206 16 8	35	95 6 8
1908, . . .	152	6,697 8 8	47	243 0 0	45	99 14 1
1909, . . .	146	6,746 9 0	59	265 14 7	58	112 2 0
1910, . . .	135	6,112 16 7	59	259 18 0	2	30 18 6
1911, . . .	141	5,948 6 8	71	313 3 4	—	—

\* Estimated.

In addition to the foregoing provision the Department, in 1911, defrayed from their own funds the cost of prizes offered with their approval by certain show societies in the counties of Antrim, Cork, Donegal, Down, Kilkenny, Londonderry and Tyrone, in connection with classes for dairy cattle, poultry-trussing and butter-making. The total amount paid for this purpose was £144. The Department also made a special grant of £50 to the county Sligo Agricultural Show Society over and above the subsidy paid by the county committee to the society in question.

#### (c.) SPECIAL INVESTIGATIONS.

Particulars of the revised scheme of field experiments are given on pages 287 to 294 of the Appendices. These AGRICULTURAL experiments are in continuation of the EXPERIMENTS AND DEMONSTRATIONS. scheme adopted in 1902, slightly modified in 1906, and extended and modified further in 1908, 1909 and 1910. In addition to the experiments included in the scheme, certain special experiments

were continued by instructors in 1910 with new, nitrogenous manures, and nitro-bacterine cultures. Experiments bearing on problems of local interest were also undertaken in many cases.

The number of experiments of each class undertaken in respect of each of the principal crops in 1910 are given in the following table :—

Crop	Manurial Experiments	Variety of Seed Experiments	Other Tests	Total
Potatoes, . . .	106	56	39	201
Turnips, . . .	118	41	—	159
Mangels, . . .	67	26	—	93
Oats, . . .	41	31	—	72
Wheat, . . .	1	26	—	27
Hay, . . .	25	—	—	25
Others, . . .	34	41	19	94
Totals, . . .	392	221	58	671

The results of the experiments were published in the Department's JOURNAL for January, 1910, and afterwards circulated in pamphlet form.

During 1911, 662 experiments and 2,124 demonstrations were laid down by the agricultural instructors. The experimental results are being tabulated and prepared for publication.

In addition to the above-mentioned experiments, special large scale experiments in the growing of wheat, barley and oats were conducted by the Department. Particulars of these are given below.

Experiments in the feeding of live stock were undertaken by instructors in Cork, Louth, and Dublin. Tests in connection with warbles in cattle were conducted by all the instructors. A smearing mixture composed of Archangel tar and paraffin oil was tested. The results obtained were found to be inconclusive, and it is intended to carry out further tests of a similar nature in the coming year.

The third series of manurial experiments with the flax crop commenced in 1909, was continued in 1910,

**FLAX-GROWING.** when plots were laid down at ten centres and reliable returns obtained from all excepting two. Trials of seed directly imported from Russia and Holland, and of Riga and Dutch brands generally sown in Ulster were also carried out at these centres. A few experiments with other foreign and home-grown seed were conducted. Full details of, and the returns in connection with, these experiments will be published in an early issue of the Department's JOURNAL, and also in leaflet form.

Information as to the flax seed harvest of 1910 in Russia and Holland was collected by the Department, and the various reports were summarised in the leaflet on Flax Seed for Sowing in 1911, which was issued early in that year.

No new flax society was established in the year under review, and no grant towards the payment of managers' salaries was paid to societies which had received assistance in this respect during previous seasons. The services of two of the Department's flax experts were, however, given to six co-operative flax societies which continued their operations.

The Department's instructor was retained in the flax-growing districts of county Cork, where, owing to the greatly increased cultivation of this crop an assistant instructor was appointed by the Department for the summer months. Further grants were made to the owners of the two old-established mills in that county for the employment of Ulster scutchers, who again gave instruction in scutching and handling to local men.

In 1910, Stewart's flax straw preparing machine was invented and placed on the market. It was devised for the purpose of squaring the straw before it is run through the rollers and thus obviate waste and increase the yield of fibre. With a view to bringing the machine before the notice of the public, the Department purchased four, and lent them to scutch mill owners during the scutching season, 1910-11. Favourable reports have been received on the working of the machines.

The report of the Committee appointed by the Vice-President of the Department in December, 1909: "to inquire into the present state of the flax growing industry in Ireland and the causes which are contributing to the decline of that industry, and to submit recommendations," was issued in January, 1911. The Committee's recommendations have been approved generally by the Department; some have already been acted upon, and the carrying out of others is under consideration. Of those which have been put into effect, the following come within the scope of this Report:—

1. The provision for an instructor in the flax-growing district in county Mayo which was made last spring; a grant towards the wages of a teaching foreman and scutcher in the larger of the two existing scutch mills which was arranged for the scutching season 1911-12; and the provision, through a local merchant, in the Spring of 1911, of sowing seed for the growers served by the second mill.

2. The granting of a loan, on easy terms, for part cost of the erection and equipment, according to approved plans and specifications, of a scutch mill in an outlying flax-growing district of county Donegal where the scutching facilities were hitherto insufficient, and a similar arrangement with the owner of a mill erected near Clonakilty to meet the requirements of the largely increased acreage in that locality. In both these cases it was arranged to make grants towards the wages of an approved mill foreman or approved workers who act as instructors to the local hands.

3. The selection, in the autumn of 1911, by competitive examination, of eight young men having a practical acquaintance with the flax crop, and the provision for the training, in 1911-12, under the Department's supervision of these apprentices in all operations connected with the growing, setting, scutching and handling, marketing, etc., of flax. At the time of writing the apprentices have commenced their work in the scutch mill, and such as complete their course of training to the Department's satisfaction will afterwards be available for employment as experts by associations of flax-growers.

4. The saving of seed from selected plants of Irish crops was carried out in 1911 on a much larger scale than that previously adopted.

The county Down and county Fermanagh committees of agriculture adopted Section A. of the Department's scheme for improvement in the flax-growing industry, and offered prizes in the scutching season, 1910-11, to the value of £201 at Shows for scutched flax. The committees of counties Armagh, Cork, Donegal, Londonderry, Monaghan and Tyrone adopted Section B. of the scheme, and offered prizes during the summer of 1911 for flax on foot. The total number of entries in these counties was 1,300, and the prizes amounted to £493 6s. 6d.

A copy of the Department's scheme will be found at page 249 of the Appendices.

The experiments in connection with the growth of early potatoes were continued in the district of Dungarvan, county Waterford. The season was extremely favourable for this crop and good returns were realised by the growers. No financial assistance was afforded to the growers in the Ycughal district of county Cork as the industry appears to be well established there. As regards that district, it is worthy of note that the "catch" crop which follows in the same season is at least profitable as the first crop of early potatoes.

Hitherto many complaints have been received concerning the difficulties of marketing early potatoes, both regarding the packages in which the potatoes are despatched and the rapid fall in prices which is experienced before the season is far advanced. In the hope of removing these disadvantages, the Department, during the past season, introduced the system of marketing the crop in chip baskets, and fixed prices for stated periods throughout the digging season were secured for the produce. The system, which is still in the experimental stage, was tried in two districts, but it will probably be tested on a more extensive scale in 1912.

The experiments in barley growing carried out in 1911 were largely a repetition of those of 1908, 1909, and 1910, the object of which was to ascertain the relative values of Danish Archer and Irish Archer which has been raised in Ireland from a selected

stock by pedigree culture; and also to what extent, if any, Danish Archer deteriorates in yielding capacity and quality by being grown in Ireland for a number of years.

In 1911 the experiments were conducted in the counties of Carlow, Cork, Kildare, Kilkenney, Louth, and Wexford. The results obtained verify those of 1908, 1909 and 1910, and demonstrate that no significant difference in either yield or quality exists between Danish Archer and Irish Archer, and also show that there is no deterioration in yield or quality of the former consequent on its cultivation in Ireland for five consecutive seasons.

The propagation of pure seed supplies of desirable varieties has been continued on the lines laid down in 1905. Further selections of suitable varieties were made in 1909 and 1910, and the produce of the same has been increased in garden and field plots at Ballinacurra, county Cork. The produce of the field plots grown at Ballinacurra in 1910 was sown in extension plots in the counties of Cork, Kildare, Kilkenney, and Tipperary in 1911, and arrangements have been made with local maltsters and others to secure the produce for seed purposes in these districts in 1912.

The propagation of selected plants was continued in the nursery at the Albert Agricultural College, Glasnevin. Plants exhibiting desirable modifications will be further propagated until sufficient seed is obtained with which to conduct quantitative field trials.

A detailed report of the results of the experiments conducted in 1911 is in course of preparation.

The present scheme of wheat experiments was commenced in 1908 with the object of ascertaining the varieties most suitable for cultivation, having regard to the value of the grain for milling purposes, and the return per acre to the grower.

The varieties sown in 1911 were the same as those of 1910, viz.: Red Fife, Red Chaff White, White Queen and White Stand Up, and the experiments were situated in the following counties:—Carlow, Cork, Dublin and Kildare.

The cultivation of pure seed wheat has been continued in a similar manner to that adopted in regard to barley, and sufficient seed of pure stocks was raised in 1911 to sow extension plots in counties Carlow, Kildare and Tipperary.

Extensive selection experiments were conducted in the nursery at the Albert Agricultural College, Glasnevin, and the produce of selected plants will be sown in garden plots at Ballinacurra in 1912. The produce of garden plots sown at Ballinacurra in 1911 has been sown in field plots at that place and the produce will be utilised for experimental purposes and for extension plots in 1913.

The produce of the milling plots of 1910 was subjected to milling tests and the reports furnished to the Department by the

firms who kindly undertook this work substantiate the conclusions already arrived at, namely, that Red Fife produces the "strongest" flour and White Stand Up the "weakest," while White Queen and Red Chaff White are intermediate in value. Baking trials were conducted by two Dublin firms, and the reports they have been so good as to supply are in accordance with the general opinion expressed by the milling firms.

In addition to the varieties grown on the milling plots the following seven French wheats and two Cambridge University new hybrid wheats were tested at the Albert Agricultural College Farm, Glasnevin:—Sensation, Treasure, Red Marvel, White Marvel, Dreadnought, Perfection, Burgoyne's Fife, Little Joss, and Red Fife.

A detailed report of the results of the field experiments of 1911 is in course of preparation.

The produce of the pure cultures of oats commenced in the Glasnevin nursery in 1909 was sown in garden plots at Ballinacurra in 1910, and the produce obtained therefrom was sown in field plots at that place in 1911. Sufficient seed of several varieties has now been obtained to conduct variety large scale tests in the country in 1912, and any surplus will be utilised for sowing extension seed plots at suitable centres. The selections made in 1910 were grown in garden plots at Ballinacurra in 1911 and the produce obtained will be used to sow field plots there in 1912.

An additional centre for experiments in the cultivation of fruit as a farm crop was established during the winter of 1910-11. Twenty residents in the neighbourhood of Ballymoney, county Antrim, offered land suitable for the purpose. Each has planted an acre with 320 apple trees selected from varieties approved by the Department, and has agreed to fence the fruit plot properly at his own expense, to cultivate and manure it, to gather, grade, and pack the fruit, to keep records of receipts and expenditure, and generally to manage his plot, in accordance with the Department's directions for a period of three years at least. The Department have defrayed half the cost of the trees planted, and are affording the occasional services of a skilled horticulturist to supervise the work and to advise the fruit growers. The Department have continued to afford the services of a horticulturist to the fruit centres established in previous years at Piltown, county Kilkenny, Broadway, county Wexford; Dungarvan, county Waterford; Newmarket-on-Fergus, county Clare; Mount Bellew, county Galway, and Moneymore, county Londonderry. The total area in Ireland planted with fruit trees in connection with these experiments now amounts to 195 acres. In addition, the Department have—as mentioned in the Ninth Annual Report—assisted plot-holders

and other residents in the district to extend the acreage under fruit at some of the centres. The following is the acreage covered by the extension plots :—

Broadway centre, 18 plots, comprising a total area of  $9\frac{1}{2}$  acres.

Piltown centre, 15 plots, comprising a total area of  $5\frac{1}{2}$  acres.

Moneymore centre, 23 plots, comprising a total area of  $13\frac{1}{2}$  acres.

The experiments in the production of tobacco may be divided under three heads, viz. : large scale experiments, small growers' (" re-handling ") experiments, and nicotine experiments.

#### TOBACCO.

*Large scale experiments.*—These were continued in 1911 on the same conditions as in the previous year. The following table gives the area cropped at each experimental centre :—

	Acres
Randlestown, co. Meath, . . . . .	26
Athlumney, do. . . . .	10
Duleek, do. . . . .	1
Emmarnore, co. Louth, . . . . .	18
Mullagh and Mullacrew, King's county, . . . . .	14
Talbottstown, co. Kilkenny, . . . . .	7
Taggart, co. Wexford, . . . . .	13
Cordangan, co. Tipperary, . . . . .	10
Adare, co. Limerick, . . . . .	20
Total, . . . . .	119

The maximum area in respect of which grants, at the rate of £50 per acre, are allowable to growers for conducting these experiments is 101 acres. The additional acreage is grown under ordinary licence, and, while no grants are payable on account of it, the results will be included with those of the area grown under subsidy.

A concession to grow two acres in county Meath, which lapsed in 1909, was taken up by another grower in the same county who had had considerable experience of tobacco growing abroad and was in a position to supervise the operations of several growers under the small growers' scheme. One of the members of the Wexford tobacco growers' society died during the year and a new member was elected by the society to take his place.

A report, bringing the results of the work down to the end of the season 1910, was published in the issue of the Department's JOURNAL for January, 1911.

*Small growers' experiments.*—As mentioned in last year's Report, the Department put into operation in 1910 a special scheme with a view to testing the suitability of tobacco as a crop for small farms. In that year the scheme was in operation at three centres and seven small farmers participated; the total area cropped by them being  $4\frac{1}{2}$  acres. A scheme on similar



lines was approved for 1911 and experiments under it are being conducted as follows :—

				Acres	
Randlestown Centre—11 small growers,	.	.	.	9½	
Adare do. 3 do.	.	.	.	2½	
Athlumney do. 2 do.	.	.	.	1	
Smarmore do. 1 do.	.	.	.	1	

No farmer is allowed to grow more than one acre under the scheme.

The scheme is working smoothly, and it appears that the subsidy allowed to the large growers who undertake the finishing of the small crops for market, viz., £25 per acre, is sufficient to provide an attractive profit on both branches of the work.

An application for additional funds for experiments to test the economies to be effected in the production of tobacco in this country by the introduction of the American system of rehandling crops is at present under consideration by the Development Commissioners.

*Nicotine experiment.*—An experiment designed to test the possibility of tobacco being grown commercially, solely for the manufacture of nicotine for insecticides, was carried out in 1910 on an area of one acre. The results showed a loss of £2 15s. 6d. per acre, but they pointed the way to certain alterations in the methods of production which have been followed in a similar experiment which is being conducted this year. The alterations involve the production of a crude fluid extract direct from the fresh green plants instead of the curing of the plants in the ordinary way.

In 1911, pipe varieties were planted on 100 acres, cigarette varieties on 28 acres, cigar varieties on 5 acres, and varieties for the production of nicotine on 1 acre.

The Department understand that four persons other than recognised experimenters grew tobacco in Ireland in 1911 under ordinary licences. The area covered by these licences is only one acre and thirty-one perches.

The season of 1911 was, on the whole, exceptionally favourable for tobacco growing. Although very dry weather seriously interfered with the preparation of the land and the planting operations, and to a slight extent curtailed the growth in some places, the unusual sunshine, dryness, and warmth were very beneficial to the quality and growth of the plant, and the continuance of dry weather to the end of the season greatly facilitated harvesting and curing. The crop would probably be the best both as to average yield and quality that has been grown since the beginning of the experiments were it not for the fact that the tobacco on about fifteen acres was unavoidably injured by insects and disease.

The tobacco grown in 1910 at all centres, except two, has been sold to manufacturers, the average price obtained being 5½d. per lb. The prices ranged from 4d. to 6½d. per lb. for pipe

varieties, 6d. per lb. for cigarette varieties, and from 3½d. to 8d. per lb. for cigar varieties.

The reports of the manufacturers who purchased the crop grown in 1909 were similar to those made on the 1907 and 1908 crops. Most of the tobacco was blended carefully with foreign leaf, but in one case Irish grown tobacco alone is reported to have been used with successful results.

As the Department were of the opinion that the object for

POULTRY  
FATTENING.

which the Avondale station was started in 1904 had been to a large extent fulfilled, and that the demand for trained fatteners could in future be met by the provision of apprenticeships at approved privately-owned poultry stations, the work of this station was transferred in August, 1911, to a similar station newly established in the district under private management. An arrangement of this nature, by which four apprentices will be trained at the Castle poultry farm, Rathdrum, during the coming year, has been completed.

At the beginning of the year 1910-11 five apprentices (three second year and two first year) were in training. The three second year apprentices completed their course in March 1911 and left the station qualified to act as poultry fatteners. Two of these apprentices, on the conclusion of their course at Avondale, took out satisfactorily a six weeks' course of instruction at a co-operative poultry society in the duties of manager of a co-operative poultry society. Of the two first-year apprentices, one left without completing his training, and one is at present undergoing instruction at the Castle poultry farm, Rathdrum. No examination for poultry fattening apprenticeships was held during the period under review. Four county instructors in poultry-keeping attended supplementary courses in the fattening, trussing of fowl, the grading of eggs, etc., at the station in January, 1911.

At the commencement of the year 1910-11, one poultry-fattening establishment was in receipt of a subsidy from the Department towards the wages of a fattener. The period for which the subsidy was allowed in this case, terminated shortly after the commencement of the year. Three other stations have since been granted subsidies of £1 5s. per week towards the wages of a fattener for a period of twelve months, and a subsidy has been provisionally approved in a fourth case.

In view of the necessity of developing to the utmost extent the production of eggs and poultry in the United Kingdom to meet the increasing demand caused by diminution in supplies from abroad, a conference of those interested in the industry was convened by the Department, and held in Dublin early in May, 1911. In organising the conference the Department were much indebted to the active

CONFERENCE ON  
THE  
POULTRY INDUSTRY.

co-operation of the Board of Agriculture and Fisheries, and of the various societies and colleges in Great Britain and Ireland engaged in the work of education and organisation in connection with the industry. Upwards of 200 delegates and members from all parts of the United Kingdom attended, representing educational authorities, organising societies, producers, shippers, carriers, and distributors of eggs and poultry. Interesting and instructive papers, prepared by experts in their several departments, were discussed at length, and the proceedings of the conference were fully reported in the Press of the United Kingdom. The Department believe that the interest thus aroused cannot fail to tell in favour of the industry.

During the course of the proceedings it was stated that Ireland now holds first place among the countries which supply eggs and poultry to Great Britain. The value of her exports under these heads during the past two years approached the sum of £4,000,000 per annum, showing, as compared with the value of these exports in 1904, an increase of almost £1,000,000. It was also shown that the poultry supplied at the present time by Ireland to Great Britain exceeds in value that supplied by all the other countries in Europe combined. The Department believe, however, that the industry in Ireland is capable of much greater development. The annual expenditure in Great Britain on eggs and poultry is stated to be £21,000,000, and Ireland, by reason of its proximity, is most favourably situated for supplying a much larger proportion of the demands of this magnificent market than it at present does.

It is to be hoped that still further advantage will be taken by producers in this country of the various schemes for the development of the industry administered by the Department and the county committees, and that, by the use of improved methods of grading, packing, and marketing, the value of Irish exports will continue to be increased from year to year.

A full report of the proceedings of the conference, containing copies of the papers read and the discussions thereon, has been prepared by the Department, and may be obtained from E. Ponsonby, Ltd., Government Sale Agents, 116 Grafton Street, Dublin, price 1s., postage extra.

Buyers continue to report a steady, although slow, improvement in the methods of marketing adopted

**MARKETING  
OF EGGS.**

by Irish producers and shippers; but they still complain bitterly of the too frequent admixture of stale eggs amongst those invoiced as "new laid." The Department have more than once had occasion to point out to British buyers that the too common practice of buying the cheapest eggs offered, without any guarantee as to freshness, is largely responsible for the continuance of the fault complained of. There is no doubt that when prices are rising, both producers and higglers have a tendency to "hold" eggs, and not unfrequently what are known as "har-

vest" eggs are sold by producers as "fresh." Shippers who desire to ensure that the eggs they pack are fresh should, when prices are rising, test all eggs by the light test, as recommended by the Department. The adoption of this practice would entail some additional expense, but it appears to be the only efficacious method of ensuring the reliability of guarantees as to freshness on rising markets. It is difficult to conceive that any shipper consistently adopting such a practice would not very soon establish such a reputation for reliability as would ensure steady sales at prices sufficient to cover all extra expenses incurred.

The more general adoption of the practice of spraying, and the increased production of apples, such as

MARKETING  
OF FRUIT.

Bramley's Seedling, and other readily marketable varieties, have done much to further the demand for Irish apples on British

markets. It is freely admitted by the best authorities in the trade that Ireland produces the finest late-keeping cooking apple known on British markets, *i.e.*, Bramley's Seedling, but the quantity is limited. It remains for Irish fruit-growers to increase their output of this variety, and by good culture and proper attention to spraying, etc., to improve its average quality. Those who cultivate apples for market should aim at producing large quantities of the three or four varieties which can be most profitably cultivated in their districts. If fruit culture is to be profitable, it is essential that the produce shall be marketed in suitable condition, properly graded, and carefully packed.

The grading conditions, standard barrel, and standard box for apples, recommended by the Department, have been adopted by many Irish growers, and have proved satisfactory. It is hoped that in all districts in which the culture of apples for market is developed to any considerable extent, growers will adopt the grading conditions and standard packages referred to, so that uniformity may be attained. The Department strongly recommends that growers should form themselves into associations for the promotion and protection of their interests. The formation of such associations enables fruit growers to keep themselves more in touch with the Department than would otherwise be possible, and tends to the general adoption of uniform grading and packing conditions.

The Department's efforts to induce shippers of blackberries to use converted butter kiels, holding about 100 lbs. of berries, instead of casks holding about 3½ cwt. of fruit, have been attended with a large measure of success. Serious complaints had been made in the past by many British jam makers as to the unsatisfactory condition in which much of this fruit was delivered. The Department, accordingly, used their influence with Irish buyers and shippers to induce them to adopt improved methods of collecting and packing the fruit. The converted kiel was used during the past season by shippers with very satisfactory results; so much so that the demand for converted kiels con-

siderably exceeded the supply. Buyers expressed themselves as well pleased with the new package, stating that the fruit was delivered in very much better condition than when sent in large casks. The Department are also endeavouring to promote the export of blackberries of the best quality in chip baskets, as there is a large sale for such fruit in Great Britain.

Attention has also been given to the marketing of bilberries and other wild fruits.

Under the scheme for encouraging improvement in the management of creameries (see page 273 of the Appendices), visits to creameries and auxiliary creameries are made by the Department's instructors in dairying; and surprise butter inspections are held. The number of creameries and auxiliary creameries participating in the scheme was 396, showing an increase of 15 on last year's figures.

1.—*Visits to Creameries and Surprise Butter Inspections.*—The following tables give (a) the number of visits to creameries made by the eight instructors in dairying; (b) the number of creameries and auxiliary creameries included in the lists issued by the Department in accordance with clause 8 of the scheme, and (c) the number of surprise butter inspections held by the Department:—

Year ended 30th Sept., 1911	Number of Places visited by Instructors in Dairying	Number of Visits made by the In- structors	List of Creameries and Auxiliary Creameries published in accordance with Clause 8 of the Scheme		
			Date of Issue	No. of Creameries on List	No. of Auxiliary Creameries on List
Creameries, Auxiliary	176	1,052	21st Oct., 1910, .	88	111
Creameries,	220	988	26th Jan., 1911, .	89	111
			26th April, 1911, .	98	112
Totals, .	396	2,040	1st Aug., 1911, .	95	118

*Surprise butter inspections.*

Telegrams Issued during the year ended 30th Sept., 1911	Exhibits Judged	Number of Exhibit	Number of Prizes awarded	
			First Class £2	Second Class £1
9th November, 1910,	16th Nov., 1910,	70	2	5
5th December, 1910,	14th Dec., 1910,	56	2	2
31st March, 1911,	6th April, 1911,	42	—	—
5th May, 1911,	11th May, 1911,	76	—	—
12th July, 1911,	19th July, 1911,	73	—	—

2.—*Local Surprise Butter Inspections.*—Up to the present year the surprise butter inspections (hitherto known as surprise butter competitions) were carried out solely by the Department. It was decided this year to discontinue the awarding of prizes at these inspections and to devote instead portion of the available funds to encouraging local surprise butter inspections to be carried out by committees representative of the proprietors and managers of all the participating creameries. The Department agreed to make grants towards the cost of inspections held by local committees of this kind, subject to the following conditions :

- (1) That a sufficient number of creameries participate regularly in the inspections.
- (2) That all the regulations made by the local committee are submitted to the Department for approval and are approved by the Department.
- (3) That a proportion of the cost of the inspections is contributed by the proprietors of participating creameries.
- (4) That the local committee accepts complete responsibility for the proper carrying-out of the inspections.
- (5) That the inspections are carried out strictly in accordance with the regulations as prescribed by the local committee and approved by the Department.

This arrangement did not come into operation in 1911 until the season was well advanced, as the preliminaries in connection with the formation of the local committees occupied necessarily a considerable time. The following table shows the number of surprise butter inspections held by two local associations formed for the purpose :—

Name of Association conducting Surprise Butter Inspection	Number of Creameries comprising Association	Number of Surprise Butter Inspections held
North West Dairy Association, .	15	3
Suir Valley Creameries Association, .	13	2

The Department, on the application of the associations, have agreed to make a grant in each case equivalent to one half of the cost of the inspections held during the year 1911, provided that the total cost does not exceed a sum equivalent to £2 for each participating creamery and that the total liability of the Department to each association does not exceed £20.

**3.—Certificates. Practical Training of Managers and Dairy-maids.**—The following table gives the number of creamery certificates awarded and the number of pupils trained at creameries during the year 1911 :—

Examination for Certificates					Practical Training at Creameries	
Date of Examination	Number of Candidates	Number of Certificates awarded			Pupil Creamery Managers	Pupil Dairy-maids
		Creamery Managers' Certificates	Certificates of having passed Examination	TOTAL		
8th, 9th and 10th March, 1911,	18	2	7	9	7	3

Candidates at the examinations for creamery certificates are examined in the subjects of dairy bacteriology, dairy technology, dairy engineering, physical science and business methods. The creamery manager's certificate is awarded only to successful candidates who have managed a creamery to the satisfaction of the Department.

The pupils referred to in the table above receive a maintenance allowance at the rate of 10s. per week while stationed at the creamery, in addition to free instruction.

**4.—Courses of Instruction for Managers.**—At the request of a branch of the Irish Creamery Managers' Association in the north of Ireland and of another branch of the association in the south of Ireland, two short courses of instruction in subjects relating to creamery management were provided by the Department last winter at Omagh, county Tyrone, and at Killenaule, county Tipperary. These courses were largely availed of by the local creamery managers (22 managers attended the course at Omagh and 18 that at Killenaule); and requests for similar courses next season have already been received.

The Department have offered to a limited number of creamery managers free places at the creamery course to be held at the Department's agricultural station, Ballyhaise, county Cavan, this winter.

**5.—Experiments and Investigations.**—(a) The results of the experiment relating to winter dairying carried out at the Cen-

tenary Company's creamery in county Tipperary, although not conclusive, justified the continuance of the investigation, which aims at answering the following questions :—

1. What is the highest price which can be paid, in the case of an average creamery, for milk during the winter months ? and
2. Will this price be sufficient to induce farmers to undertake milk production for creameries during the winter season ?

The Department accordingly arranged this year with three creameries for the purpose of prosecuting this investigation.

In the case of two of these creameries, viz.: Drumholm Co-operative Agricultural and Dairy Society's creamery in county Donegal, and Lissarda Co-operative Dairy Society's creamery in county Cork, the Department guaranteed the proprietors against any loss which might be incurred by them in paying their suppliers at the following rates :—

A minimum price of 5d. per gallon during the months of December, January, and February, and of 4½d. during the month of March.

The society may, in addition to paying for milk at the above-mentioned rates, pay a supplier who increases his winter milk production an extra 1d. per gallon for the quantity by which his total milk supply during the period December to March, inclusive, in any one year, exceeds the total quantity supplied by him during the same months in the preceding year.

The foregoing arrangement is to hold good for a period of three years from the 1st December, 1911.

In consideration of the Department's guarantee, the societies have agreed to conduct their business in such manner as the Department may approve and to keep such records and accounts as the Department may consider desirable for the purposes of the experiment.

In the case of the third creamery, which is owned by the Piltown Co-operative Agricultural and Dairy Society, the Department have given no guarantee, but have agreed to defray half the remuneration for one year of an assistant, in order to help the society in carrying out the alterations in the manner of conducting the business of the creamery which are required in connection with the experiment.

In the case of all three creameries, the Department have stipulated that cow testing associations shall be formed among the milk suppliers.

(b) The investigation (referred to in last year's Report) into the effects on butter of the use of various brands of salt and the value of the use of a preservative was continued this year. The results of the further investigation are not yet available.

(c) The Department have continued this year to supply monthly to a number of creamery proprietors and managers, in accordance with the system outlined in last year's Report, statistics giving particulars of the costs of manufacture and of the prices received for butter at a number of creameries. The



collection and issuing of these statistics is, however, now carried out by the Statistics and Intelligence Branch of the Department.

6.—*Cow-Testing Associations*.—Twelve cow-testing associations have been formed in connection with the Department's scheme for improving the dairy cattle of Ireland. These associations consist of dairy farmers who agree to test the quality and quantity of milk yielded by each of the cows in their herds with a view to discarding those cows which give poor yields of milk and to replacing them by cows of a good milking strain. In this way the average milk yield of Irish cows will, it is hoped, be gradually increased.

These associations are located as follows:—2 in county Cavan, 2 in county Cork, 1 in county Donegal, 2 in county Kilkenny, 1 in county Limerick, 1 in county Sligo, 1 in county Tipperary, 2 in county Tyrone.

In addition to the experiments carried out in connection with the creameries mentioned at page 83, WINTER DAIRYING, the Department, as stated in the last Annual Report, arranged to repeat on one farm in each of the counties Tyrone and Cork, the investigations as to the results obtained from the system of summer dairying as compared with that of winter milk production. Unfortunately, the experiment in county Cork had to be abandoned owing to an outbreak of abortion amongst the cows which had been set apart for the test. It is hoped that results from the experiment in county Tyrone will be available for publication at an early date.

Investigations of a similar nature were continued at the Department's agricultural stations.

*Caerphilly Cheese*.—At present the production of cheese, as compared with the production of butter, is very small in Ireland. In order to encourage the manufacture of cheese in this country, the Department, by providing the services of an experienced maker and by general supervision, assisted a Dairy company in county Cork to undertake an experiment in the manufacture of Caerphilly cheese. The results of the experiment were most successful; the net return after making allowance for the cost of marketing, being about 8d. per gallon for the milk used. As this cheese can be made successfully from milk produced during the winter months, it offers a very good opening for the disposal of whole milk during the winter season. The Department have arranged for the training of makers with a view to the extension of the manufacture of this class of cheese in Ireland in the near future. Four pupils are in training at present. An account of the experiment will be found in the Department's JOURNAL, Vol. XI., No. 4.

*Cheddar Cheese.*—The following is a summary of the results obtained at Ballyhaise Agricultural Station for the seasons 1908, 1909 and 1910 :—

	1908.	1909.	1910.
Milk made into Cheese, .	13,103 gallons	18,412 gallons,	14,977 gallons,
Curd produced, .	13,411 lbs.	18,672 lbs.	15,152 lbs.
Ripe Cheese sold, .	11,704 lbs.,	16,670 lbs.	13,194 lbs.
Shrinkage in ripening, .	12·8 per cent.	11·8 per cent.	13 per cent.
Gross value, .	£325 18s. 7d.	£440 12s. 0d.	£336 7s. 5d.
Net value of cheese, .	6·6d. per lb.	6·34d. per lb.	6·1d. per lb.
Net value of milk, .	5·97d. per gal.	5·74d. per gal.	5·3d. per gal.

The low prices for new cheese prevailing in the 1909-10 season continued for the greater portion of the 1910-11 season. The prices during the latter season ranged from 50s. per cwt. for spring cheese to 65s. per cwt. for summer cheese. An increase in prices is anticipated in the coming season. As in previous season, the whey was used for pig feeding.

*Stilton Cheese.*—Arrangements were made in 1910 to have a pupil from Ireland trained as a maker of Stilton cheese under an experienced manufacturer in England. Since the conclusion of his training he has been employed at the Department's agricultural station, Ballyhaise, where he made Stilton cheese during 1911. If the results are favourable, the Department will consider the advisability of promoting the manufacture of this class of cheese as an industry in Ireland.

During the summer of 1911, two experiments on the fattening of cattle on grass were carried out—one in county Dublin and one in County Louth. **CATTLE FEEDING EXPERIMENTS.** The experiments, which were supervised by the county agricultural instructors, were devised with the object of testing home-grown feeding stuffs against imported feeding stuffs. The home-grown produce consisted of a mixture of ground wheat, oats and barley, while the imported food stuffs consisted of a mixture of undecorticated cotton cake and Indian meal. The results of the experiments will be published in the Department's JOURNAL. The question of the economy of selling grain produced on the farm and of purchasing imported feeding stuffs is one of vital importance to many farmers, and the Department hope to arrange for further experiments of a somewhat similar nature.

Other experiments on the feeding of cattle and pigs are in progress at the agricultural stations.

In view of the results obtained in connection with the marketing in London of the trial consignments of meat from Enniscorthy and Strabane mentioned in the Annual Report for 1909-10, conferences were held towards the close of 1909-10 between

representatives of the Department and farmers from counties Cork, Down, Kildare, Louth, Tyrone, and Wexford, who were interested in the project of establishing a dead meat trade with London or other large cities. As a result of these conferences, the Department made provision for grants towards defraying preliminary expenses and providing expert advice in the initial stages of the industry as follows :—

(a) To be administered by the county Louth committee of agriculture in connection with the industry started at Drogheda, and to be applied for the following purposes :—

1. Remuneration of qualified instructor for one year.
2. Remuneration of qualified butcher for one year.
3. Miscellaneous expenses, such as travelling expenses of instructor, fees of expert to advise *re* abattoir, etc.

(b) To be administered by the county Wexford committee of agriculture for similar objects in connection with the industry started at Wexford.

(c) To the North of Ireland Cattle Feeders' Association in connection with the marketing of a few trial consignments from Belfast, to be applied in the payment of wages of an expert butcher for some weeks, cost of carriage of consignments and certain incidental expenses.

The dead meat society formed in county Louth by the Louth and Meath Farmers' Association commenced work in January, 1911, and continued the marketing of meat until the end of May, when it was decided to suspend work for a few months owing to want of a suitable abattoir and also to the warm weather. Animals had, up to that time, been slaughtered in the premises of local butchers. The salesmen disposing of the meat in London reported very favourably both as to its quality and the manner in which it was dressed and stated that it could stand comparison with Scotch meat. The county Louth society are considering plans for the construction of an abattoir.

The dead meat society formed at Wexford did not avail themselves of any portion of the grant made to the county committee of agriculture for county Wexford, as they proposed that the money should be utilised in carrying out a scheme for testing methods of feeding cattle instead of being expended as indicated above. The details of the scheme of feeding experiments had not been finally arranged at the end of the year under review.

In the experiment carried out by the North of Ireland Cattle Feeders' Association, 41 beasts were slaughtered in Belfast and disposed of in London. The prices realised were regarded by feeders as satisfactory in view of the rates current in the home markets.

Several hundred samples of copper sulphate and washing soda

ANALYSIS OF  
SPRAYING  
MATERIALS.

were subjected to analysis during the season, and it is to be noted with satisfaction that, with the exception of one case, where wrong material had been inadvertently supplied by a trader, all the samples were up to the

high standard of purity required for spraying purposes.

It may be observed that the only instances that have occurred during the past few seasons of samples submitted being found to be unsuitable for spraying purposes were cases similar to that above referred to, in which wrong material was inadvertently supplied. The fact that such errors are possible should impress upon farmers the desirability of having their spraying materials tested before using them.

A special report of proceedings under this Act is now published annually by the Department.

FERTILISERS AND  
FEEDING STUFFS  
ACT, 1906.

The report in respect of the year 1910-11 is at present in course of preparation, copies of which, when published, may be purchased from E. Ponsonby, Ltd., Government Sale

Agents, 116 Grafton Street, Dublin.

During the year special courses of instruction on matters connected with the technical side of their business were provided by the Department for the benefit of traders engaged in the sale of artificial manures and feeding stuffs. The classes were well attended, and the traders expressed their appreciation of the value of the instruction provided, which is calculated to prove of great assistance to them in the conduct of their business. Arrangements have been made by the Department for the holding of similar classes in other towns, and they will be glad to receive applications from traders desiring to have classes of this nature held in their neighbourhoods.

Two officers were again detailed by the Department to devote their whole time, during portion of the spring, to the work of visiting the shops and stores of merchants engaged in the sale of fertilisers and feeding stuffs. From these officers and from their official samplers throughout the country, the Department received upwards of 800 samples representative of the manures and feeding stuffs sold or offered for sale, from an examination of which very useful information as to the condition of the trade was obtained. The Department are glad to be able to report a reduction in the demand on the part of Irish farmers for the low grade, imported compound manures, reference to which has been made in previous reports. The warnings issued by the Department in regard to these manures, and the experiences which many have had of the results of using them, have convinced most farmers of the folly of expending money in the purchase of such inferior mixtures.

In the report, referred to above, particulars are given of two interesting cases in county Tipperary, in which a number of

small farmers were processed in the County Court by Liverpool firms for amounts charged for supplies of such compounds. These charges the farmers had declined to pay, on the grounds that their orders for the manures had been obtained by means of misrepresentation on the part of the firms' agents, and that the manures supplied were worthless for the growing of crops. Evidence in support of their pleas was given by the county agricultural instructor and by the Department's analyst, and the cases were dismissed with costs against the plaintiff companies.

During the past year prosecutions under the Act were instituted by the Department against manufacturing firms in Liverpool, Glasgow, and Dublin for selling to Irish farmers feeding stuffs which were not of the standard guaranteed, or which contained ingredients worthless for feeding purposes, and not disclosed in the invoices. A conviction was obtained in each case, and fines varying from £2 to £15, with costs, were imposed.

*American Gooseberry Mildew and Black Currant Mite (Ireland)*  
Order, 1908.

The work of inspection under the provisions of this Order was continued as in former years. Visits were

DESTRUCTIVE paid by each itinerant instructor in horti-  
INSECTS AND PESTS culture to gardens in his district, and reports  
ACTS, 1877 AND 1907 were submitted to the Department in all cases where disease was found to exist.

118 cases of American Gooseberry Mildew, and 111 cases of Black Currant Mite were reported during the year. Notices requiring the immediate destruction of all diseased bushes were served on the growers in these instances, and further measures prescribed with a view to preventing the spread of the disease. In all, some 60,000 bushes affected with American Gooseberry Mildew or Black Currant Mite were destroyed without compensation.

Applications were received from several nurserymen in Ireland for permission to import bushes, but, owing to the provisions of Article 5 of the Order, the Department were precluded from issuing licences, as in no case was it shown that the bushes were intended solely for the purpose of experiment, or of propagating new varieties.

Further spraying experiments were carried out during the year under the direction of the Department. The results obtained did not alter the opinion, previously expressed, of the Department that, whilst spraying with certain fungicides is a useful preventive measure, the only certain method of eradicating the American Mildew, once it has made its appearance in a garden, is the immediate destruction, by burning, of all the affected bushes.

*Black Scab in Potatoes (Ireland) Order, 1908.*

Arrangements were again made last season for the thorough inspection of the lands on which outbreaks of Black Scab had been discovered in former years, and an officer of the Department was detailed to inspect the potatoes when being lifted and pitted. Five additional cases of the disease were discovered, all in the same small district in county Down, in which this disease had previously made its appearance. Two of these five outbreaks occurred on the lands of occupiers on other portions of whose premises affected tubers had been found in 1908 and 1909 respectively. All the outbreaks were of a very slight extent, the number of diseased tubers found in each case being comparatively trifling. Notices were immediately served on the growers requiring them to burn all diseased tubers and all the haulms, and to dispose of the remaining healthy tubers in the manner prescribed by the Department. An officer of the Department personally supervised the measures taken by the growers to comply with the requirements of the notices served. In addition, the growers were prohibited from again planting potatoes on the same ground without the sanction of the Department.

As a result of the complete inspections which have been made during the last three years, the Department have every reason to believe that the disease is confined entirely to the one small district in which it has so far appeared.

The regulations governing the importation of potatoes into Malta remained unchanged during the past year. The Department issued the usual certificates required by the Maltese authorities stating that Black Scab did not exist in the counties from which the potatoes were exported. The total shipments for the season amounted to 3,738 tons.

*Weeds.*—As mentioned in last year's Report, the councils of sixteen counties signified their consent to the making by the Department of Noxious Weeds Orders in respect of their counties. Early this year, the Department made further representations on the subject to the remaining councils, as a result of which the councils of three additional counties, viz.: King's, Louth and Tipperary (N.R.), intimated their desire to have the provisions of Part I. of the Act put into force in their administrative areas. These intimations were not, however, conveyed to the Department in time to permit of the counties concerned being included in the scheme of inspection during the past season. The matter was also brought under the notice of the county borough councils, and Part I. of the Act is now in force in the county boroughs of Dublin and Belfast.

The appended list shows the counties and county boroughs

in which this Part of the Act is now in operation, together with the weeds scheduled as noxious in each case.

<i>County.</i>	<i>Plants declared to be Noxious.</i>
Antrim . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Armagh, . . .	Ragwort, Thistle, Dock.
Down, . . .	Charlock, Coltsfoot, Thistle, Dock.
Dublin, . . .	Ragwort, Coltsfoot, Thistle, Dock.
Fermanagh, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Kerry, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Kildare, . . .	Ragwort, Coltsfoot, Thistle, Dock.
Kilkenny, . . .	Thistle.
King's, . . .	Thistle, Dock.
Limerick, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Londonderry, . . .	Thistle, Dock.
Louth, . . .	Ragwort, Coltsfoot, Thistle, Dock.
Meath, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Monaghan, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Queen's, . . .	Ragwort, Coltsfoot, Thistle, Dock.
Roscommon, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Tipperary (N.R.), . . .	Charlock, Ragwort, Thistle.
„ (S.R.), . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Westmeath, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
<i>County Boroughs.</i>	
Belfast, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.
Dublin, . . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.

The work of inspection under the Act was commenced on 20th June and continued until the middle of September. This entailed the almost constant employment during this period of 21 inspecting officers from whom reports were received in regard to over 6,000 cases of prevalence of weeds, as compared with 2,468 cases reported last year. In 5,874 cases, notices requiring the destruction of weeds were served on the occupiers. The inspectors reported that the requirements of the notices had been fully complied with in 5,366 of these cases (91·4 per cent.); partly complied with in 440 cases (7·5 per cent.), (chiefly cases reported by inspectors late in the season and in which it was found on their second visits that the work of destruction was

being proceeded with); and no action was taken by the occupiers or responsible parties in 68 cases (1·1 per cent.). The Department were unable, in the limited time at their disposal, to obtain accurate information as to the ownership, etc., of a number of farms on which noxious weeds were reported as being prevalent. In 21 instances, prosecutions against occupiers for failure to cut weeds as required on their lands were instituted by the Department, with the result that convictions were obtained and fines imposed in all the cases. On several occasions the magistrates gave warnings that in future years heavier penalties would be inflicted.

The foregoing figures show that the number of cases in which difficulty was experienced in inducing farmers to cut their weeds was trifling. In the remaining cases the requirements of the notices were willingly complied with.

The appended table shows the number of cases dealt with in each county:—

County	Number of Notices				No. of Prosecutions
	Served	Complied with	Partly Complied with	Not Complied with	
Antrim, . . .	223	185	34	4	1
Armagh, . . .	242	227	11	4	—
Down, . . .	101	96	3	2	—
Dublin, . . .	275	257	15	3	—
Fermanagh, . .	113	105	8	—	—
Kerry, . . .	452	378	58	16	—
Kildare, . . .	443	387	53	3	—
Kilkenny, . . .	240	184	48	8	7
Limerick, . . .	633	591	32	10	2
Londonderry, .	580	575	2	3	2
Meath, . . .	598	546	49	3	—
Monaghan, . .	214	187	26	1	—
Queen's, . . .	404	371	32	1	—
Roscommon, . .	281	265	12	4	1
Tipperary, S.R.,	722	677	43	2	6
Westmeath, . .	353	335	14	4	2
Totals, . . .	5,874	5,366	440	68	21

*Seeds.*—Under the provisions of Part II. of the Act, 1,784 samples of agricultural seeds were taken by the Department's officers from stocks on the premises of retail and wholesale vendors of seeds throughout the country. Of these samples 682 were tested for purity and germination, and the results of the tests showed that large quantities of inferior, and in some cases worthless, seeds are being sold in many districts. The Department in consequence have under serious consideration at present the question of publishing the results of the tests



in some of the worst cases together with the names of the vendors of the seeds. They are reluctant to adopt this unpleasant course, and have only done so up to the present in one instance where a wholesale merchant and one of his retail customers persisted, in spite of warnings, in selling seeds of an excessively inferior description. It will, however, be necessary for the Department to have recourse to more drastic measures if signs of improvement are not manifested in the general condition of the trade in this country.

In view of the importance of this subject the Department have decided to prepare a special report of proceedings under Part II. of this Act which will be published along with the report of proceedings under the Fertilisers and Feeding Stuffs Act previously referred to. Copies of the combined report, on publication, may be purchased from E. Ponsonby, Ltd., 116 Grafton Street, Dublin.

During the year 1910-11, the total number of samples tested was 2,089, being an increase of 138 over the number tested last year. Of these samples, 931 were received from farmers, 229 from seed merchants, and 247 from the Department's officials. The remaining 682 samples were selected for testing from the number of samples taken throughout the country

pursuance of the provisions of Part II. of the Weeds and Agricultural Seeds (Ireland) Act, 1909. An increase in the number of samples submitted for testing over that of the previous year is shown in the case of each of the four above-mentioned sources with the exception of that of farmers, where there is a decrease of 120 samples. With the exception of the samples tested under the Act, and also of 13 others received from seed merchants outside of Ireland, the counties from which the samples were received, and the number received from each, will be found in the accompanying table:—

County.	No. of Samples.	County.	No. of Samples.
Antrim . . . . .	141	Limerick . . . . .	4
Armagh . . . . .	43	Londonderry . . . . .	128
Carlow . . . . .	54	Longford . . . . .	0
Cavan . . . . .	35	Louth . . . . .	38
Clare . . . . .	0	Mayo . . . . .	9
Cork . . . . .	183	Meath . . . . .	8
Donegal . . . . .	32	Monaghan . . . . .	22
Down . . . . .	75	Queen's County . . . . .	10
Dublin . . . . .	192	Roscommon . . . . .	0
Fermanagh . . . . .	4	Sligo . . . . .	0
Galway . . . . .	3	Tipperary . . . . .	55
Kerry . . . . .	28	Tyrone . . . . .	94
Kildare . . . . .	32	Waterford . . . . .	44
Kilkenny . . . . .	26	West Meath . . . . .	1
King's County . . . . .	37	Wexford . . . . .	93
Leitrim . . . . .	0	Wicklow . . . . .	3

It will be noted that the distribution of the samples over the

various counties is a very uneven one, but it by no means follows that because few or no samples were sent in from particular counties the seeds in use in such counties are above reproach as regards quality. On the contrary, tests made of samples taken under the Act show that in the majority of cases large quantities of inferior seeds are to be found in use in those very counties in which the farmers take little or no advantage of the facilities offered to them by the Department through their Seed Testing Station for ascertaining the quality of the seeds they use.

The accompanying table is a summary of the results of the tests for purity and germination of the various kinds of seeds (excluding those examined under the Act) made during the year:—

Name of Seed.	No. of Samples Tested.	Purity.			Germination.		
		Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
Wheat, . . . . .	30	100	99	100	99	22	80
Oats, . . . . .	103	100	98'6	100	99	8	85
Barley, . . . . .	43	100	100	100	99	34	83
Rye, . . . . .	8	100	100	100	93	23	61
Perennial Rye, . . . . .	139	100	84'5	97'6	94	40	88
Italian Rye, . . . . .	154	100	74'3	98'4	96	50	77
Mixed Italian and Perennial Rye, . . . . .	2	93'7	53'8	76'8	18	5	11
Meadow Fescue, . . . . .	26	100	94'3	98'5	99	47	89
Meadow Foxtail, . . . . .	19	98'1	88'4	96'1	74	11	47
Timothy, . . . . .	31	99'7	87'1	97'5	95	20	78
Cocksfoot, . . . . .	49	100	78'6	96'3	95	41	79
Crested Dogtail, . . . . .	9	99'5	91'4	95'1	82	36	68
Hard Fescue, . . . . .	1	99'4	99'4	99'4	57	57	57
Tall Fescue, . . . . .	1	93'4	93'4	93'4	70	70	70
Rough Stalked Meadow Grass, . . . . .	1	95'5	95'5	95'5	75	75	75
Red Clover, . . . . .	95	99'8	92'7	97'3	98 & 1h	58 & 6h	90 & 4h
White Clover, . . . . .	34	99'9	76'5	94'3	98 & 1h	35 & 7h	68 & 14h
Alsike Clover, . . . . .	38	99'5	87'8	96'1	98 & 1h	70 & 12h	87 & 7h
Trefoil, . . . . .	8	99'8	91	95'9	94 & 2h	32	59 & 9h
Sweet, . . . . .	48	100	98'2	99'3	99	48	90
Turnip, . . . . .	21	100	99'8	100	99	47	88
Rape, . . . . .	4	100	100	100	100	93	97
Cabbage, . . . . .	13	100	100	100	88	22	63
Mangel, . . . . .	37	100	100	100	100	17	117
Beet, . . . . .	1	100	100	100	120	120	120
Carrot, . . . . .	4	97'2	94	96'4	68	32	46
Onion, . . . . .	4	100	99'6	99'8	68	52	62
Parsnip, . . . . .	2	100	100	100	67	47	57
Flax, . . . . .	440	100	83'5	98'8	99	39	90
Vetches, . . . . .	9	100	84	96'4	96	48	83
Tobacco, . . . . .	15	—	—	—	85	19	50

*Wheat*:—There were many good samples germinating 90 per cent. and over; one-third, however, of the samples tested were of inferior quality, two of them germinating only 31 per cent. and 22 per cent. respectively.

*Oats*:—About half the samples tested were very good, but, as in the previous year, many of the remainder were inferior, germinations such as 64 per cent., 58 per cent., 49 per cent., and 8 per cent. being recorded.

*Barley*:—The average germination was 7 per cent. lower than in the previous year. About half the samples tested germinated 90 per cent. and over, but there were some very bad samples, the germination in four or five cases being under 50 per cent.

*Rye* :—A few samples only were tested and in only one instance could the germination be looked upon as being really first-class. There were three very unsatisfactory samples germinating only 46 per cent., 24 per cent., 23 per cent. respectively.

*Perennial Rye* :—The purity in the majority of cases was very satisfactory, but the same cannot be said as regards germination, for only seventeen out of 139 samples tested germinated 90 per cent. and over, while in some cases the germination was as low as 58 per cent., 56 per cent., 45 per cent. and 40 per cent.

*Italian Rye* :—The purity was, with one or two exceptions, very satisfactory, but the germination in the majority of cases somewhat low—only ten out of 154 samples tested germinating 90 per cent. and over.

*Meadow Foxtail* :—The purity was very satisfactory, but as is usually the case, the majority of the samples tested were of low germination, only one sample germinating over 70 per cent.

*Meadow Fescue* :—The purity of all the samples tested was satisfactory, and the average germination was much better than in the previous year, being 16 per cent. higher. There were two inferior samples germinating 47 per cent. and 59 per cent. respectively.

*Timothy* :—The purity was, on the whole, satisfactory, but only eight out of the 51 samples tested germinated 90 per cent. and over. Several of the samples germinated only about 70 per cent. or less.

*Cocksfoot* :—The average germination was 5 per cent. higher than in the previous year. Seven of the samples germinated 90 per cent. and over, but more than 50 per cent. of them gave low germination results. The purity was, on the whole, good.

*Crested Dogtail* :—The purity was very satisfactory, and the germination of the majority of samples fairly so. There were two inferior samples germinating 42 per cent. and 36 per cent. respectively.

*Red Clover* :—The average germination was 4 per cent. and the average purity 3 per cent. higher than in the previous year. The majority of the samples tested were of satisfactory germination; a few, however, were not so good, the results being only 75 per cent., 69 per cent., 68 per cent. and 56 per cent. Only 6 per cent. of the samples contained seeds of Dodder as compared with 22 per cent. in the previous year.

*White Clover* :—Much of the white clover tested was of low germination, and contained an exceptionally large number of "hard" seeds. Only six samples germinated 90 per cent. and over. The purity of nearly all the samples was, however, satisfactory.

*Alsike* :—The average purity was the same as in the previous year, and the average germination 2 per cent. higher. About one-third of the samples tested were of first class quality.

*Trefoil* :—Only six samples were tested and four of these germinated exceedingly badly. The purity of three of the samples left a good deal to be desired.

*Mangel* :—The germination of this seed was considerably better than in the previous year. More than two-thirds of the samples tested germinated over 100 per cent. as compared with one-third in the previous year. Two very bad samples were received which germinated only 40 per cent. and 17 per cent. respectively.

*Swede, Turnip, Rape* :—As is usually the case with these seeds, the purity and germination were satisfactory, two only of the samples tested being decidedly bad.

*Flax* :—A greater number of samples of this seed was tested than in the previous year, viz. :—440 as compared with 271. The purity was quite satisfactory with one exception—two-thirds of the samples germinated over 90 per cent. Two samples were decidedly bad, germinating 50 per cent. and 39 per cent. respectively, and the remainder of the samples were of unsatisfactory germination.

*Cabbage* :—About half of the samples tested were satisfactory, the remainder being very inferior, the germination in some cases being as low as 39 per cent., 34 per cent., 29 per cent. and 22 per cent.

*Carrot* :—The four samples tested were satisfactory with regard to purity, but the germination was poor, the best sample germinating only 58 per cent.

*Parsnip* :—The samples of this seed were pure, but the germination was only 67 per cent. and 47 per cent. in the two cases.

*Vetches* :—The purity and germination of the majority of the samples tested was satisfactory. There was only one really bad sample which germinated 48 per cent.

In view of the many complaints regarding losses caused by diseases in the potato crop, especially in the west of Ireland, it was decided to establish a temporary research station in that part of the country where investigations as to the causes of the various diseases could be carried out, and trials of remedial and preventive measures made. The centre selected was Clifden, county Galway, and the work, which is still in progress, was commenced there in the Spring of 1909.

#### INVESTIGATION OF POTATO DISEASES.

In addition to carrying out spraying and other experimental work in connection with ordinary potato blight, the following diseases have been studied in more or less detail, viz. :—"Yellow Blight," "Black Stalk Rot," "Stalk (or Sclerotium) Disease," "Spongospora Scab," and "Leaf Roll and Curl"; while certain forms of rot in the tubers, due to causes not yet fully ascertained, are also undergoing detailed study.

As a result of the work, a large amount of valuable information has been gathered concerning the various diseases to which the potato is subject in Ireland, and illustrated accounts of the results already obtained have been published in the Department's

JOURNAL (Vol. X., No. 2, Jan., 1910, and Vol. XI. No. 3, April, 1911). Further reports of the work as it progresses will be published in the JOURNAL.

The training of foresters at Avondale forestry station was continued on the lines followed in previous years. Twelve acres were planted and additions were made to the forest plots.

About 50,000 young trees were supplied from the station nurseries to other forestry centres under the Department. Several useful specimens were added to the museum collection during the year.

The usual annual examination for forestry apprenticeships was held in September, 1910. The prospectus of this examination is printed at page 226 of the appendices. The minimum age limit for candidates was reduced from twenty to eighteen, and a maximum age limit of twenty-five was fixed. Six applicants were selected for apprenticeships and sent to Dundrum forestry station for their first year's course. Four of the six apprentices who had previously concluded their first year's course at Dundrum were regarded as suitable for more extended training and were transferred to Avondale to follow the second year's course there during the session 1910-11. Five of the second year apprentices at Avondale were retained for a third year. The total number of forestry apprentices in training during the year was accordingly fifteen.

The following table gives the areas of woodlands and lands adapted for forestry which have been acquired by the Department as forestry stations with the aid of the Vote of £6,000 per annum made by Parliament for this purpose :—

Centre	Date of acquisition by Department	Area		
		A.	R.	P.
Dundrum, co. Tipperary, . . .	19-6-1908	1,196	2	23
Camolin, co. Wexford, . . .	7-8-1908	646	1	25
Aghrane, co. Galway, . . .	28-1-1910	1,277	0	36
Bailieborough, co. Cavan, . . .	28-4-1910	404	3	6
Ballykelly, co. Londonderry, . . .	17-11-1910	253	2	15
Knockmany, co. Tyrone, . . .	10-3-1911	467	0	9
Baunreagh, Queen's county, . . .	1-5-1911	1,928	3	22
Woodford, co. Galway, . . .	20-6-1911	433	0	31
Kilrush, co. Clare, . . .	14-7-1911	*406	0	11
Total, . . .		7,011	3	18

\* Department have received possession to date of only 386a., 1r., 23p., at this centre.

During the season about thirty acres were planted at Dundrum, thirty-five acres at Camolin, forty acres at Aghrane, and fifteen acres at Bailieborough. At the stations acquired during

the year the principal work consisted in erecting and repairing fences, laying out nurseries, and draining land, preparatory to planting. The demand for sawn timber at the Dundrum saw-mill continued to be good and satisfactory prices were received. Preparations are being made at Camolin and Aghrane for the erection of saw-mills.

Reference was made in the last Report to the application of the Department for a grant for forestry in Ireland from the Development Fund. The Development Commissioners have recommended that advances not exceeding £25,000 in all be made as they may from time to time be required, for the purchase of certain areas available for afforestation. The advances to be by way of loan, not repayable and bearing no interest for thirty years: the question of requiring interest and provision for repayment will be further considered at the end of that period. The Treasury have approved these recommendations and the Department are at present in negotiation for the purchase of afforestable lands with the aid of the money thus provided.

As in previous years the services of the Department's forestry expert were availed of very fully by private owners and public bodies. So far as work in the Department's woods admitted, the working foresters, trained by the Department, were placed at the disposal of persons undertaking planting or other forestry operations. In such cases the foresters' wages were paid by the persons employing them.

A large number of applications by letter for advice in forestry matters were received and dealt with during the year, and the leaflets on forestry subjects were widely distributed.

The leaflets and a series of articles on forestry subjects which had appeared in the Department's *Journal* were re-issued in pamphlet form, with numerous illustrations. This pamphlet should meet the requirements of tree planters and owners of woods who desire to have in handy form a collection of practical notes on the chief points to be considered in connection with the formation, management and protection of woodlands in Ireland.

Thirty-two applications from purchasers of holdings under the Irish Land Acts for the consent of the Department under the provisions of Section 32 of the Act of 1909 to the felling of trees on their holdings, were received during the year. After careful investigation the Department acceded in full to eighteen of these applications and in part to two. In the remaining twelve cases investigations had not been completed at the close of the year under review.

1. *Credit Societies.*—The total amount issued in loans for these purposes during the year ended 30th September, 1911, was £251. The three agricultural credit societies obtaining these loans

LOANS FOR  
AGRICULTURAL  
PURPOSES.

had previously obtained advances of a similar kind. From 1900 to 30th September 1911, a sum of £18,142 had been issued on loan to 170 Societies, and of this sum £8,271 was outstanding on the latter date.

As in previous years, a few loans were withdrawn by the Department for various reasons.

2. *Thistle Cutters*.—One loan of £9 was granted for the purchase of a Thistle cutting machine.

3. *Fencing*.—During the year, 101 applications for loans were received. Four of these were subsequently withdrawn or cancelled, and thirty-seven were still under consideration at the end of the year. The applications received included several from county Kerry, where arrangements are being made to enable the farmers in the congested districts to take advantage of the scheme. The total number of loans granted, including some in respect of which the applications had been received in the previous year was 80, the amount involved being £1,277. The extent to which the scheme has been availed of is set forth in the accompanying Table :—

Year ended 30th Sept.	No. of applications	No. of applications withdrawn	No. of applications under consideration on 30-9-11	No. of Loans granted	Amount of Loans granted
1907, ) 1908, ) 1909, )	170	20	—	156	£2,771
1910, .	97	6	2	63	£1,175
1911, .	101	4	37	80	£1,277
Totals, .	368	30	39	299	£5,223

4. *Hand Separators*.—The number of hand separators purchased during the year under this scheme was 13, the cost of which amounted to £108. These were supplied to 11 applicants in county Cork and 2 in county Kerry.

5. *Horse Spraying Machines*.—In connection with this scheme, twenty-four loans were granted during the past year, the amount expended being £206. As in previous years, the applicant in each case agreed to hire the machine to others in his district at fees fixed by the county committees of agriculture and approved by the Department.

In addition, the Armagh, Cavan, Dublin, Longford, and Mayo county committees purchased, with the Department's consent, 186 knapsack sprayers for hire to small farmers and others in the counties named, at a small daily charge. The cost of these machines was borne by the joint fund of the county committees concerned.

6. *Meal Mills, etc.*—No loans were granted under this scheme during the past year, as none of the applications received were proceeded with.

7. *Village Halls.*—Loans amounting to £450 were advanced in the cases of two approved applications mentioned in last year's Report. An application received and approved during the year was ultimately withdrawn.

See page 277 of the Appendices.

## 2.—TECHNICAL INSTRUCTION.

This section of the Report covers the Academic Year, 1st August, 1910, to 31st July, 1911. Many important matters connected with the Department's operations in the different districts are dealt with in the Reports of the Inspectors, which will be found elsewhere under this section. Certain questions of general interest are, however, dealt with here.

The revised Regulations for the administration of the Science and Art Grants in Technical Schools and Classes have now been in operation for five years and have been found to work well. Two great principles were embodied in them: (1) the payment of grants for organised courses of instruction, and (2) an increased rate of payment for prolonged attendance. The effect of the introduction of the "Course" system has been wholly beneficial, and the schemes of work in Urban centres, both large and small, have been rendered much more efficient as a result of this provision. It was always recognised that such a scheme could not be introduced into sparsely populated districts where the conditions are unfavourable to the introduction of highly organised schemes of instruction. It was, nevertheless, evident that excellent and highly necessary teaching is carried on in numerous centres in the Rural districts of Ireland, and the Department were glad to be in a position to announce that Treasury sanction had been given to a supplementary scheme under which grants on a lower scale of payment might be paid for single subjects, and it is anticipated that this new provision will have a very beneficial effect upon the teaching in small centres.

The Department, in making grants in aid of instruction under its various programmes, have never made written examinations a criterion, but have sought by means of a thorough system of inspection to adjust the aid to the character and amount of work done. As a result, local authorities, and schools not under local



authorities, have thus been enabled to adapt their curricula to local needs, and this has produced an encouraging diversity in the type of schools which have been developed in connection with the Department. Schools have, nevertheless, been anxious to avail themselves of the examinations of the Board of Education and other examining bodies, and the Department have extended considerable facilities to schools in order to enable them to make use of these examinations. Indeed the Department have recognised certain of these examinations as a qualification for teachers working under their schemes. The Board of Education have, however, recently effected extensive changes in their system of examinations, and these changes are such that the Department can no longer make use of them to the same extent as formerly. They have, therefore, found it necessary to take into consideration a scheme for an examination system adapted to the conditions of their own programmes. This matter is now being dealt with.

The schemes of Technical Instruction administered by local authorities throughout Ireland continue to

**SCHEMES UNDER LOCAL AUTHORITIES.** do excellent work. Reference has been made in previous reports to the serious want of suitable buildings of a permanent character. Already a number of new buildings have been provided, and the cost of erection is being paid out of the annual income of the schemes. This, however, very seriously interferes with the development of the educational work undertaken by the various authorities.

Attention may be drawn to the continued success of the system of Itinerant Instruction under County Schemes. The courses consist principally of Manual Instruction for male students and Domestic Economy for women students, and these courses have grown in popularity and usefulness. There is little doubt that they contribute in a large measure to the amelioration of the conditions of rural life. The extension of the work is hindered by the want of suitable accommodation in which to hold the classes, but some improvement has taken place in this matter. County Armagh has this year provided a portable wooden house with a canvas roof, and it is hoped that this experiment will prove successful.

It may be remarked that the new scheme of Technical and Apprenticeship Scholarships for Boys has already been adopted by a number of counties, and it is hoped that the scheme will prove very beneficial.

The following table shews the number of students (with their occupations) attending instruction in the four provinces:—

TABLE SHOWING THE OCCUPATIONS OF STUDENTS ATTENDING URBAN AND COUNTY SCHOOLS AND CLASSES IN NON-AGRICULTURAL SUBJECTS.

Occupations of Students	Leinster	Munster	Ulster	Con-naught	Totals
<b>YOUNG MEN.</b>					
Persons engaged in Farming Occupations.	653	395	808	615	2,471
Building & Trades—including Workers in Wood, &c.	324	438	433	64	1,259
Coach and Car Builders,	23	37	14	7	81
Engineers, Workers in Metal, Draughtsmen, &c.	405	230	877	5	1,517
Architects, Surveyors, Civil Engineers, &c.	37	43	67	—	147
Electrical Engineers, Scientific Instrument Makers, &c.	94	76	94	2	266
Printing Trades—Compositors, Lithographers, &c.	75	48	90	14	227
Textile Industries—Designers, Weavers, &c.	53	26	574	14	667
Painters and Decorators,	57	60	90	23	230
Plumbers, Gasfitters, &c.	58	52	77	5	192
Trades involving applied Art—Jewellers, Furniture Makers, &c.	33	54	55	18	160
Chemists, Analysts, Drug-gists, &c.	55	49	126	8	238
Salesmen, Shopkeepers, Warehousemen, &c.	317	302	701	87	1,407
Clerks in Commercial Offices,	538	314	837	32	1,721
Clerks in Banks, Civil Service, Law, Assurance and Accountants' Offices.	235	108	224	3	570
Teachers, Assistant Teachers, Pupil Teachers.	150	208	314	75	747
Students (University, Law, and Medical).	78	36	54	45	213
Occupations not included in the above classes.	587	289	517	28	1,421
Boys just left School or College.	147	150	128	12	437
Boys still in attendance at School or College.	732	1,016	600	178	2,526
No Occupation stated,	266	244	243	92	845
<b>TOTAL NUMBER OF YOUNG MEN.</b>	<b>4,917</b>	<b>4,175</b>	<b>6,923</b>	<b>1,327</b>	<b>17,342</b>
Corresponding Numbers for 1909-10.	4,936	4,338	6,515	995	16,784

## OCCUPATIONS OF STUDENTS—continued.

Occupations of Students	Leinster	Munster	Ulster	Con-naught	Totals
<b>YOUNG WOMEN.</b>					
Persons engaged in Farming Occupations.	959	1,826	1,301	1,281	5,367
Domestic Servants, . . .	596	379	546	84	1,605
Printing Trades, . . .	13	5	19	—	37
Dressmakers, Milliners, &c.	175	167	384	40	766
Textile Industries—Designers, Weavers, &c.	148	1	426	16	591
Factory Workers not included in above.	95	16	535	3	649
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn Thread Work, &c.	221	506	1,167	202	2,096
Saleswomen, Shopkeepers, &c.	278	478	473	105	1,334
Clerks, Cashiers, Civil Servants, &c.	319	120	623	30	1,092
Teachers, Assistant Teachers, Pupil Teachers.	433	439	1,059	162	2,093
Students (University, Medical)	19	17	81	—	117
Occupations not included in above Classes.	526	469	665	215	1,875
Girls just left School or College.	242	288	214	17	761
Girls still in attendance at School or College.	696	975	753	395	2,819
No Occupation stated, . . .	1,130	1,147	2,188	300	4,765
<b>TOTAL NUMBER OF YOUNG WOMEN.</b>	<b>5,850</b>	<b>6,833</b>	<b>10,434</b>	<b>2,850</b>	<b>25,967</b>
Corresponding Numbers for 1899-10	6,408	7,122	9,397	3,198	26,125
<b>TOTAL NUMBER OF STUDENTS.</b>	<b>10,767</b>	<b>11,008</b>	<b>17,357</b>	<b>4,177</b>	<b>43,309</b>
Corresponding Numbers for 1909-10.	11,344	11,460	15,912	4,193	42,909

Reference will be found in the reports of Inspectors to Home Industries Classes conducted under the Department's Schemes. Particular reference may be made to the successful experiment of developing the glove making industry in Tipperary. These classes have been in operation for several years in connection with the industry and have had the effect of employing a large amount of female labour in healthy occupation. In addition, a certain number of boys are employed in the cutting branch, and these follow a regular course of apprenticeship. Independently of such efforts made in connection with local authorities, the Department have given a large amount of direct aid to rural industries. Particular attention may be directed to the Machine Embroidery School which has been established at Ballydougan near Gilford in County Down. The rural industry known as "Sprigging" has, for some years past, declined. A part cause is doubtless the growth of machine embroidery in Switzerland. For many years past a large amount of Irish cambric has been sent from the north of Ireland to Switzerland to be embroidered by machine. The goods are then returned to this country for sale. The Department arranged a detailed inquiry into the conditions under which this industry was carried on in Switzerland, and came to the conclusion that there was no reason why such an industry should not be developed in this country, not with a view of supplanting the hand industry which is still carried on, but with a view to the increased demand for embroidered goods executed by machine. They therefore encouraged the establishment of an embroidery school in which the machine embroidery as carried on in Switzerland is taught, and have approved the establishment of a second school at Maghera in County Londonderry. The school at Ballydougan has already given most satisfactory proof of its usefulness, and it is confidently hoped that it will contribute to the growth of this industry, which is one which may be carried on satisfactorily under rural conditions.

The work done under the Department's Programme for Secondary Schools is making satisfactory progress. The Department believe that the subjects of their programme have come to take a due place in the curriculum of Secondary Schools and that the balance between these subjects and other portions of the curriculum is satisfactory. They note with regret some decline in the schools taking Manual instruction.

The following table shows the growth and present position of the work in Secondary Schools:—

Province and Year.	No. of Schools.	No. of Pupils who worked through the Courses, and upon account of whom grants were payable.					Amount of Grants Earned.
		Preliminary Course, 1st Year.	Preliminary Course, 2nd Year.	Special Courses, 3rd Year.	Special Courses, 4th Year.	Totals (Individual Pupils).	
LEINSTER.							£ s. d.
1901-2, .	66	2,732	—	—	—	2,732	3,932 3 11
1904-5, .	103	2,128	1,363	468	119	4,078	7,530 19 0
1907-8, .	111	2,406	1,721	799	246	5,136	9,951 2 9
1909-10, .	108	2,359	1,785	991	294	5,389	10,593 13 1
1910-11, .	108	2,590	1,685	1,096	243	5,545	10,650 0 0
MUNSTER.							
1901-2, .	39	2,098	—	—	—	2,098	2,943 9 4
1904-5, .	70	1,507	867	384	52	2,810	5,350 7 1
1907-8, .	82	1,905	1,285	619	128	3,924	7,286 14 11
1909-10, .	81	1,720	1,227	745	212	3,852	7,074 13 4
1910-11, .	82	1,818	1,199	717	160	4,080	7,170 0 0
ULSTER.							
1901-2, .	42	1,596	—	—	—	1,596	2,431 7 0
1904-5, .	68	1,184	735	315	81	2,315	5,316 8 8
1907-8, .	77	1,520	1,103	491	119	3,211	7,676 19 0
1909-10, .	78	1,628	1,132	555	145	3,434	8,067 5 7
1910-11, .	79	1,503	1,219	574	151	3,422	8,440 0 0
CONNAUGHT.							
1901-2, .	7	189	—	—	—	189	268 10 5
1904-5, .	15	272	201	100	15	588	1,219 8 11
1907-8, .	19	382	276	150	38	844	1,810 8 6
1909-10, .	16	306	239	157	38	731	1,848 0 1
1910-11, .	16	277	202	116	16	611	1,740 0 0
TOTALS.							
1901-2, .	154	6,615	—	—	—	6,615	9,575 10 8
1904-5, .	256	5,091	3,166	1,267	267	9,791	19,417 3 8
1907-8, .	289	6,213	4,385	2,059	531	13,115	26,725 5 2
1909-10, .	283	6,013	4,383	2,448	689	13,406	27,583 12 1
1910-11, .	285	6,188	4,305	2,503	570	13,658	28,000 0 0

The figures for the Session 1910-11 are approximations only.



drawing, a number of them (after persuasion) are replacing the old-fashioned long desks by single desks, without which the proper arrangement of the pupils for model drawing is almost impossible. In many schools, Drawing boards and T squares are required both for Geometrical Drawing and for the advanced classes. Where they have been provided for Geometrical Drawing, not only has more work been accomplished (owing to the facilities for working they afford), but the work is more accurate.

The teaching of Domestic Economy is being slowly, but surely, developed. Wherever it has been introduced into the school curriculum it has become a popular subject with the pupils; and the principals, realising how much can be effected by this subject, are giving increased attention, and providing better accommodation for it.

There has been a decrease in the number of schools taking Manual Instruction. This, no doubt, is owing to the fact that this subject is not recognised for "Intermediate purposes," rather than the plea of costliness frequently advanced against its adoption. This decrease is regrettable; for, while the subject may not be directly of importance to students preparing for the University or the Civil Service, there are a large number of pupils in the schools—especially those in the rural districts—to whom a course in Manual Instruction would be of direct advantage. Where this subject has been taken it has generally been very well handled, and the pupils have improved in neatness, accuracy and self-reliance.

#### DAY TRADES PREPARATORY SCHOOLS.

Except at three schools, two in Belfast and one in Pembroke, which have as many pupils as they can accommodate, the numbers attending these schools are small. This is difficult to account for, as the training given in them is thoroughly practical and its value is so fully recognised by employers that boys on leaving the schools, even after a two years' course, find no difficulty in obtaining employment at once, and generally at better remuneration than those from schools where the training is less practical. However, there are some signs of improvement, and as parents recognise the opportunities these schools offer they will be more largely attended.

The promise shown by the school in Clonmel has been realised, and there is every prospect of it becoming a very successful school. Successful beginnings were also made at Ballymena and Londonderry, and although the number of pupils at the last-named school was small, already a very fair number have been enrolled for next session.

The Christian Brothers intend starting a Trades Preparatory School in Cork, where they have excellent equipment for such a school, and, from the position they hold in this city, they should have no difficulty in making it a success.

#### TECHNICAL INSTRUCTION UNDER LOCAL AUTHORITIES.

With very few exceptions, there has been an increase in the numbers attending the classes under Local Authorities. This increase has been most marked in the urban centres in Ulster, and, indeed, in many cases has been so great as to present committees with the serious difficulty of providing accommodation for the enlarged classes. It is satisfactory to note that this increase has been due to the influx of serious pupils who propose pursuing their studies for three or more years. That this is so may be gathered from the following remarks.

There had been a tendency on the part of Committees and teachers to admit, indiscriminately, all pupils, irrespective of their capabilities or previous training, to any class they presented themselves for. As should have been expected, the results were very unsatisfactory. The teachers were unable to give suitable class instruction to all, and the pupils, finding that they did not get what they wanted, ceased to attend the classes. This attitude of the Committees and teachers has to a large extent changed, and more efficient teaching and a more regular attendance of the pupils secured.

The introduction of the "Course System," under which grants are only payable, for the instruction of pupils who are adequately prepared for it, has resulted in a more careful control of class entries; the formation of Preparatory Courses for those whose previous training is not sufficient to enable them to follow what may be regarded as the special classes. The entry to these Preparatory courses is also controlled, though in a lesser degree. Committees have also recognised that useful work is almost, if not altogether, impossible in very mixed classes, and have in some places, very wisely, decided to refuse admission to day scholars to their evening classes. The pupils are recognising that these regulations have been made for their benefit, and are beginning to place themselves in the hands of principals and teachers as to the course of study they ought to follow.

Committees and principals, recognising that the "Course System" not only makes for educational efficiency, but also that under it they are financially in a better position, are giving more attention to it. Much, however, yet remains to be done before the best results can be obtained under the system. Generally, the schools have attempted too many courses, and have endeavoured to make these courses too wide. In many of the small schools in the urban centres it is impossible to run several courses successfully, or to teach a multiplicity of subjects with the small staff at their disposal. Sounder and more useful work will be done, the local circumstances and requirements having been carefully considered, by deciding not to attempt more than two or three courses; or it may be only one, to which all energies will be devoted and by which the school shall become known. These courses should be clearly defined, and should present continuous schemes of study, designed to extend over four or more years, in progressive syllabuses of instruction—syllabuses not based upon the Programmes of examining bodies, but drafted to meet the special requirements of the locality.

Probably the gravest defect that can be pointed out in our Technical Schools is that they do not retain their pupils long enough to raise the standard of the artisan and workman in any marked degree. Every year sees large numbers enrolled in the Preparatory and "First Year" specialised classes, while the numbers enrolled for the second year are very disappointing, and those for the third and subsequent years are insignificant—and the average attendance of pupils at the specialized classes is scarcely two years. This is a very serious matter, and one that demands the serious consideration of all connected with the Schools. The time, energy and expense given to the early stages of a pupil's education is quite as great as that which would be spent upon the later stages; but these later stages are of far more value to the pupil, and it is to them that we must look for the real improvement of the artisans and workers. With a view to encouraging continued attendance at the Schools, Committees have offered scholarships and prizes to promising pupils—the prizes taking the form of free instruction for the succeeding year together with the necessary books. These inducements, while good, can scarcely be said to produce any effect in the direction intended, except in the case of a very few. The solution of the question is, I believe, to be found in (1) securing the interest and co-operation of employers, and obtaining from them some recognition of the hours spent by their apprentices in the schools, and (2) in providing better graded courses of instruction, with syllabuses dealing with the daily wants of the pupils, taught by teachers with high qualifications and practical experience. The provision of such teachers is a real difficulty with the smaller schools which cannot afford to pay for many whole time officers, and have to take what the locality can provide. It is, however, a matter of regret that the best teachers available have not always been employed. It is but right to add that it is not the small schools alone that have acted in this short-sighted manner.

Special day classes for apprentices have been held in Belfast, Portadown, Fermoy, Clonmel, Limerick and Waterford. The numbers attending these classes have been small, as employers have not as yet recognised that it would be to their own advantage to allow their apprentices the time to



attend these classes, and thus become more efficient craftsmen. Except in Belfast, the instruction given in these classes has been of a very elementary nature.

The difficulties which arose between the Department and the Borough of Dublin, and which resulted in the withdrawal of the scheme for the year, are referred to elsewhere. Otherwise, all the schemes of the previous year were worked as before. A few of the counties, however, adopted the Department's new Scheme of Scholarships for boys, but the effect of this will not be noticeable till the ensuing session. Special developments and matters of note in connection with these schemes are dealt with by the District and Special Expert Inspectors in their reports.

The difficulty of providing suitable accommodation for classes still exists, but is being gradually solved in the urban centres by building. The new schools in Cork, Larne, and New Ross were completed during the year, and should be ready for work for the session 1911-12. Navan, Rathmines, and Tralee are preparing to build, and it is hoped that no time will be lost in the two last mentioned districts which are urgently in need of better accommodation for their classes.

MR. TURNBULL, *Inspector for the Southern District*, reports :—

#### COUNTY SCHEMES.

The gradual development of Technical Instruction in the Counties has arisen from the experience of preceding years; classes and subjects that have been proved to be unsuitable have been discontinued or modified, and those that have been found valuable, educationally, have been expanded and improved. A County Scheme of the simplest type provides manual instruction in Woodwork for young men, and Domestic Economy instruction for young women.

All Counties, except Limerick, had successful courses of manual instruction in operation during the session in urban and rural centres, and at the latter, the equipment was often housed in an old shed, barn, or other disused room in which the class was, perhaps, restricted in size owing to the limited space available for instruction. In these classes were to be found young tradesmen, farmers and labourers, and each student was provided with a place at the bench and a set of tools. Beginners were required to construct a progressive set of models which included the simpler joints, and thus they were taught the use of the ordinary wood-working tools. Students who had attended during previous years were given more advanced exercises, and as far as possible their models were such as could be made use of in their homes. When considerable skill had been acquired, the student was permitted to make a large article, such as a chair, cabinet, wheelbarrow, etc., but in these cases he had to bear the cost of the timber employed. In the earlier stages of work the students are expected first to make drawings in plan, elevation and isometric or oblique projection, of the models to be constructed. It sometimes happens, however, that the older students are diffident about attempting drawing, and occasionally instructors show weakness in permitting these students to proceed without a knowledge of drawing. It is hoped that Instructors will insist upon drawings being made, because this part of the students' work is of fundamental importance and ought to take precedence of mere manual skill in the handling of tools; they should remember also that the Course is mainly educational and is based upon a sound knowledge of drawing.

In Counties which include urban centres other subjects bearing on the Building Trades were taught by the Manual Instructors. These subjects were Mathematics, Practical Plane and Solid Geometry, Building Construction, Carpentry and Joinery, and in a few cases, Handrailing and Woodcarving. The attendance at those urban courses was variable and depended upon such conditions as the ability of the Instructors to interest their students, the local supply of suitable tradesmen, and the amount of work to keep those tradesmen employed near the centres of instruction.

Such classes cannot be judged by mere numbers in attendance. Much earnest work has been accomplished by individual students who have in consequence become more valuable to their employers and who have sometimes been enabled to obtain situations which they could not have filled unless they had received sound technical instruction.

What the Manual Instructors are doing for the young men of the county, the Instructresses in Domestic Economy are doing for the young women. The well-being of the population depends primarily on the comfort and happiness of the home. In the earlier years of the County Schemes, Cookery, Laundry work and Needlework were taught as isolated subjects, and the success of any class was the result largely of the personal training and taste of the Instructress. Laundry work was the least successful of the three subjects, because teachers often showed their aversion not so much by speech as by action and unsympathetic attitude. There were Instructresses, however, who took up the subject *con amore*, and these seldom failed to fill their classes and interest their students. In recent years there has been development in the teaching of Domestic Economy in the direction of Household Management in the widest sense; it aims at the training of students in all the subjects that are useful to the housekeeper, such as the care of the house generally with cleaning and renovating, domestic and personal hygiene with lessons in first aid to the injured, and sick nursing, in addition to Cookery, Laundry work and Needlework. The widening of the course had awakened the best interests of the students, and there has been a steady demand for instruction at most of the centres. For this work instructresses must have high aims and high ideals, they must keep in touch with the conditions and requirements of their students and make their instruction suitable to those conditions. Happily, the majority of instructresses are of such a type.

The only County in Munster that has developed Courses of instruction in Commercial subjects is Cork, and this is due to the large number of urban centres and small towns included in its Scheme. The shopkeepers' assistants find that they have much to learn in the classes for Book-keeping and Business Methods. Three Instructors were engaged during the session in various centres throughout the County, and they conducted classes in the afternoons for senior school pupils, and in the evenings for those engaged in business, although the latter classes often included day scholars. The withdrawal of Typewriting at the end of the previous session did not appreciably affect the attendance at these courses, and owing to the limited time at the disposal of each Instructor it would be an advantage in many cases if the Course were confined to Book-keeping and Business Methods. The proportion of students who proceed to a second year course is still too small, and it would be better if the first year students were more strictly selected. It is doubtful whether it is judicious to conduct a class which is composed of day scholars and those engaged in business. In such a class it is impossible to adopt a standard of instruction suitable to all, and the result is often discouraging to the business student. The only effective method is to exclude day scholars from evening classes when provision is made for their instruction during earlier hours.

The only Counties that provided Itinerant Courses in Art were Cork, Kerry and Waterford. In the first named there were two instructors and among the students were craftsmen and others whose daily occupations could be improved by the application of good drawing and design. In Fermoy and Youghal there has been a steady development of Art as applied to callings such as those of the woodcarver, plasterer, stone-cutter, stained-glass worker, lace-maker, and embroiderer, and it is on such lines that Art teaching must develop if it is to capture the interests of the people. In Kerry with two and Waterford with one Instructor the scope of the teaching is more limited, but there also the classes have been attended by tradesmen and craftsmen.

The County Industries that have been developed educationally are those in Lace and Crochet-making, Hosiery and Needlework, including Dress-making and Home-sewing. These industries were continued mainly at

Convent centres, but there were a few short courses in Lace and Crochet-work conducted by the Committee's Instructress in Co. Cork. None of these industries is self-supporting, but the wages earned by many of the workers are as good as they would receive in other industries, and in many cases expert workers are able to make Crochet in their own homes during their leisure hours. Care is taken at most of those centres to give the workers instruction in drawing and design, and at all the permanent courses the workers must undergo systematic training in Cookery and other household subjects.

The Residential Schools of Domestic Training are situated at Dunmanway, Carrick-on-Suir and Dundrum, and are managed by Convent authorities. Each of these schools has one or more fully qualified lay teachers most of whom are appointed and paid by the County Committees, and these teachers are responsible for the main subjects of the course. The students are the daughters of farmers and workmen; they are trained in all household duties, and their course is essentially practical. In addition, there is instruction in poultry-keeping, and, in some cases, dairying, pig-rearing and gardening. The Course is not intended to qualify students for teaching, but after a year in residence, each student is expected to return to her own home to practise and disseminate the knowledge she has acquired. Formerly many students were supported in these schools by means of county scholarships, but the County Cork Committee have withdrawn their scholarships, and now the Dunmanway school is filled with fee-paying students from various counties. There is a fourth Residential School of a higher type managed by the Ursuline Convent at Waterford. The fees are higher and the training of a different character than at the three other schools, and the students, who are fee-paying, take the course after having received a good general education of a secondary character. The course consists of the ordinary household subjects and gardening, and due attention is paid to instruction in literary subjects.

Counties Kerry, Limerick, Tipperary (N.R.), and Waterford continued their system of scholarships to primary school boys to enable them to attend Secondary or Day Trades Preparatory Schools, only such schools being eligible as would provide sound instruction in experimental science, mathematics, drawing and manual instruction. This scheme has now been replaced by a revised scheme issued by the Department, but holders of Scholarships under the old scheme have been allowed—where their progress has been such as to justify it—to retain their scholarships for another year.

#### CITY AND URBAN SCHEMES.

During the session the new Technical Institutes at Cork and Limerick were under construction, and approached completion in readiness for the opening of the session, 1911-12. The Waterford and Clonmel schools underwent slight internal re-construction which added a lecture and science room, respectively, and contributed towards more effective teaching. Tralee was compelled for another session to continue its classes in rooms which are very unsuitable and inadequate for the purpose. The scheme in Tipperary urban centre still suffers from the want of a central building in which to house the classes, and until such a school is established, the attendance of students will be affected adversely. The Queenstown school is mainly an engineering centre, and the equipment and accommodation for that course and for Building Trades' subjects are very good, but the rooms set apart for Commercial and other classes are small and ill suited for instruction.

The introduction of the Course system has had a beneficial effect on the Trades' classes, and in most cases the technical education of young men is concurrent with their period of apprenticeship. That is perhaps one of the most important features of the later development of the system, and apprentices in some firms are now encouraged by their employers to undergo a regular course of technical instruction. The day classes for apprentices were continued at Limerick, Waterford, and Fermoy. According to this

scheme, employers in the Building, Engineering and other trades permit their apprentices to attend classes at the Technical Schools during the day time, and attendance at these classes counts as time spent at the works. These apprentices attend also for instruction at evening meetings, and one employer grants a further concession by permitting his apprentices to start work at a later hour than usual on the morning following an evening attendance. The progress made by apprentices is generally slow during the first year because of their unpreparedness in Mathematics when they come to the Technical School, and it is difficult to convince them that a sound knowledge of the more special subjects which bear on their trades is impossible without a careful and prolonged study of Mathematics.

In the large schools there are always students who take up the higher branches and subjects in Pure and Applied Science, such as Physics and Chemistry, Builders' Quantities, Telegraphy, Telephony and Electrical Engineering, and although many of these classes have been small because of the limited constituency from which they could be formed, yet the students worked well and derived much benefit from their theoretical and practical studies. During the past session, Courses for Bootmakers, Plumbers, Printers, Gardeners, Painters and Decorators were continued at Cork, and for Tailors' Cutters at Cork and Limerick. In many of these courses the students are handicapped by defective elementary education, and they seldom realise that in addition to attending their special trade class they ought also to study some branch of Art or Science which underlies the practice of their respective callings.

The courses in Domestic Economy were well organised at Clonmel, Tralee and Waterford. At Cork, due provision was made for a sound course in Dressmaking and Millinery, but Cookery was taught in isolated classes, no course having been arranged owing to the lack of suitable accommodation. At Limerick, where women's subjects have been taught at three centres in addition to the Central Institute, only one centre provided organised courses of instruction in Cookery, Laundry work and Hygiene. The new schools at Cork and Limerick will give the opportunity for a thorough revision of the courses in Domestic Economy.

Art instruction was continued as formerly in Schools of Art at Cork, Limerick, and Waterford, and in classes at Clonmel, Queenstown, Tipperary and Tralee. These schools and classes are in the transition stage between the former practice of giving instruction in pure art only, and the new trend towards art as applied to the Crafts. There are many indications that tradesmen and craftsmen are awakening to the necessity for a knowledge of Applied Art as a means of improving their own handiwork.

The Schools of Commerce at Cork and Limerick and the Commercial Courses at Clonmel, Queenstown, Tipperary and Tralee showed generally a good attendance, more particularly where specially trained teachers were employed. It may be stated broadly that the commercial teachers who most secure the confidence of their students are those who have had business experience in good houses prior to their special course of training; they are able to draw upon their experience in giving examples, and their ready knowledge of correct procedure in actual practice gives confidence to the business students placed under their charge. All of these schools were not equally successful, and where the classes were small or the attendance irregular the main cause was traceable to the teacher. The Cork School of Commerce was very efficiently organised, and the attendance and work of the session were better than in the preceding year. The Limerick school passed through its second session, which did not, however, realise the hopes raised by the good beginning in the previous year. The number of students who proceeded to second year studies was not commensurate with the large number who had enrolled during the first session. It will be found best, perhaps, in each of these schools, to reserve the later classes for business people only, and to make arrangements in earlier classes for the type of student who has just left school. Notwithstanding any small defects it has been amply demonstrated that the employment of highly qualified Commercial Instructors has raised the standard of Com.

mercial teaching, and where such teachers have been employed, students in business have been attracted by the soundness of the instruction given.

#### SECONDARY SCHOOLS.

The Secondary Schools took advantage very largely of the permission to allow pupils to repeat a course in Experimental Science. This is recognised as a good measure for those pupils whose brain power is of slow growth, but there is another feature that is less satisfactory, viz., the premature passing of pupils from the primary to the secondary school. This does not apply necessarily to those of tender years, for there is an age limit, but to such as have not been soundly taught in the primary school. A regrettable feature in Boys' Schools is the lessening number taking Manual Instruction in Woodwork. The subject is probably crowded out by others, but the change is to be regretted. On the other hand, the number of Domestic Economy Courses is increasing in Girls' Schools, and that is a matter for congratulation. The course is more suitable for girls than many of the advanced subjects in Pure Science, and when it is taken in conjunction with Botany or Physiology and Hygiene it becomes all the more valuable. It means the broadening of education for girls on sound practical lines, and the requirements of the home should have a place in all schemes of education for women.

#### PRIMARY SCHOOLS.

Of the forty Primary Schools in the Southern District which undertake to teach Drawing, thirty-eight are Boys' Schools. Manual Instruction in Woodwork is taught in ten schools of which seven are Industrial. Three of the industrial and twenty-four of the ordinary day schools are managed by the Christian Brothers; the remaining schools, of which two are for girls, are managed by other Religious Orders. Many of these schools are understaffed for the ordinary subjects, and the desk accommodation is not very suitable for drawing, especially in the upper standards, although some schools have improved in this respect during the last three or four years. Notwithstanding these drawbacks, good, and in some cases excellent, work has been done. Where Manual Instruction has been adopted the accommodation and equipment are, with few exceptions, very satisfactory, and the woodwork generally is carefully executed and accurately finished.

#### GENERAL.

With the experience of progressive courses of training and past years of experience of teaching, instructors and teachers in the different types of schools have become more valuable, with the result that attendances have improved, and a higher standard of work has been reached by the students.

The work of the Secondary Schools, however, is hindered by the frequent changing of teachers, even during the session. Much of the personal influence of the teacher is thereby lost, and the effect on the schools is detrimental to efficiency.

Whilst occasionally members of Technical Committees visit classes at work and encourage teachers and students, it would tend to further the interests of Committees' Schemes if a greater number of members were to ascertain personally the progress made by classes under their care.

DR. GARRETT, *Inspector for the Northern District*, reports :—

Organised schools of the polytechnic type have been conducted at thirty-one centres in Ulster during the past session. These comprise the two larger institutes at Belfast and Londonderry, sixteen conducted under independent Urban Schemes and thirteen under Joint County and Urban Schemes. Of the total, six were new, viz., those at Dromore, Antrim, Ballyclare, Portrush, Clones and Monaghan.

The buildings available may now be said to be satisfactory, except in some of the newer centres. The new school at Larne has been completed and will be ready for occupation during the coming session. It is commodious and excellently designed for its purpose. The old infirmary at Enniskillen has been converted into an excellent school which was made use of during the session. Progress has also been made with the alteration of the Markethouse for use as a school at Armagh, and arrangements have been made for the provision of a suitable building at Magherafelt, which, though a small centre, continues to attract a large number of good students.

It is satisfactory to find that the numbers undergoing instruction in the schools again increased by 10 per cent., or more than 1,100 individuals, about 6·5 per cent. of the increase being due to the new centres opened. The principal increases took place at Belfast, Ballymoney, Bangor, Coleraine, and Newtownards, but there were decreases at Londonderry, Limavady, and Strabane.

The influence of the Course System, which has now been five years in operation, is becoming every year more marked. There is, in the first place, a noticeable growth in the percentage of students enrolled taking organised courses. Two years ago it was unusual to find a school in which more than half of the students were following approved courses, and there were in fact only four such schools in Ulster. During the past session there were twenty-four schools in this position. This shows that the system is becoming rapidly more effective in its operation and that the courses are meeting the requirements of the students. In the second place, the attendance at the classes has become more regular since the system was introduced. The improvement is due to the fact that greater care is taken to prevent the admission of students to classes which they are incapable of deriving profit from. The greater homogeneity of the classes enables greater progress to be made since it creates rivalry between the students and reduces the not inconsiderable difficulties of the teachers. Further, schools are now so much alive to the desirability of fostering regular attendance that they hold out strong inducements in the form of prizes which depend primarily on regularity. It has been noticed in the case of Belfast, where several courses of a very definite character, allowing the student no choice of subjects, have been in operation side by side with similar classes where the students were allowed to group their subjects very much as they pleased, that the attendance was more regular in the course classes. This was borne out by the experience in Limavady and Magherafelt, where a well defined course system has been in operation. In the latter schools the attendance has been more regular than in any previous session. These facts go to show that the more definite the system of courses, the higher the efficiency. At present there is too much liberty of choice allowed, leading to ill-balanced progress and the neglect of fundamentals without which no solid superstructure of education can be built up.

The most serious feature of the present is, however, the shortness of the time during which most of the students remain at the schools. Taking only those who followed approved courses in any year into consideration—and they are admitted to be the best and most earnest of the students—it is found that in the following year about 50 per cent. have, in many cases, disappeared from the classes. While, therefore, many students continue their studies for four or five years, it is questionable whether the average school life of a qualified student in Ulster exceeds two years. It will be at once evident that in such a brief period the training which can be given is inadequate and that little more than a smattering of information can be obtained by many of those who enter the schools. There is thus a serious waste of effort which it should be the first duty of the schools to prevent. The success of the teaching and the benefits to be derived from it depend primarily on sustained attendance. Indications of improvement are, fortunately, not wanting. At Carrickfergus, Armagh, Ballymoney, and Cookstown, a very creditable proportion of the students are being carried on to more advanced work, and in almost all the other schools the proportion is gradually improving. Thus, in the past two years, the tota

number approved for the second and higher years of specialisation has almost doubled. That there is still great room for improvement is shown by the fact that of the entire students enrolled in the Province only a little more than 16 per cent. were eligible for grants for the second time. It is to be regretted that at Newry there is, so far, no sign of improvement, and almost the entire work of the School is done in the elementary classes. The institution of a Local Scholarship in each of the larger centres to enable the best student of the school to proceed to a higher institute would go far to encourage persevering study. Scholarships of this type have been given for some time at Belfast, with excellent results. During the year another has been arranged for at Coleraine, with the assistance of the Irish Society, and its effect has been to greatly stimulate the more advanced students. At Lurgan, where, in recent years, two valuable Drapers' Exhibitions, awarded by the City and Guilds of London Institute for proficiency in Textiles, have been won by students, the same effect is apparent.

In some cases the course system has undoubtedly led to a reduction in the number of Trade students, owing to the fact that their previous education was often insufficient to enable them to secure admission to the Specialised Courses without first spending a year at Preparatory subjects. To meet the difficulty, Trade students were admitted in Belfast to the Trade Classes, without examination, provided they attended also for English and Mathematics. The experiment proved somewhat unsatisfactory owing to the fact that the attendance was not well maintained, and also because the presence of ill-prepared students in the Trade classes greatly retarded the progress of those who were capable of following the instruction readily. The solution of the difficulty will probably be found in the recognition of the difference between "Heads" and "Hands," and the formation of special courses for the latter, aiming rather at skilful craftsmanship than at a complete understanding of underlying principles.

The students attending the Technical Schools were generally of a suitable type. Most of them were engaged during the day in various trades, industries and business concerns, and they took subjects likely to benefit them in their occupations. The influx of primary school children to the classes has been checked by the decision to make them ineligible for grants, and in most cases the few who are now admitted are on the point of leaving school, and their presence is unlikely to interfere with the successful working of the classes. At the same time special day classes for the instruction of National School girls in Cookery have been conducted in six centres, and the increased grants paid by the National Board have been found sufficient to defray expenses. Where several schools, situated within easy range of the Technical School, are willing to co-operate, this method of providing the instruction would seem to be eminently suitable and it has been proved to work well.

The work done in the schools shows a growing tendency to conform more closely to the needs of the districts concerned. Thus at Derry, special courses for shirtmakers and laundryworkers are being developed, at Banbridge and Newtownards Textile courses are projected, and at Carrickfergus much needed classes for Painters and Decorators have been carried on. In the more rural centres good classes of young farmers have been secured for woodwork and mathematics as applied to farming operations. These instances taken in conjunction with many of longer standing such as the successful Textile Departments at Belfast and Lurgan, show that the local authorities are endeavouring to bring the work of their schools to bear upon local industries. A most satisfactory feature is the fact that Domestic Classes in manufacturing centres are now very largely attended by factory operatives. For some years, difficulty was experienced in getting students of this class to attend, and special efforts were directed towards this end—notably at Banbridge and Newtownards. Now, the demand is so great that it is difficult to meet it, even with increased staff.

The teaching generally has reached a good standard. Much enthusiasm has been shown in the work and the instruction has, in nearly all cases, followed well-planned lines. The individual lessons have also been gener-

ally well prepared and clearly imparted. Where the schools have failed most is in realising the limitation of time referred to above, and in doing what can be done to meet it by the institution of definite courses designed to secure a sound and well-balanced education within the limits imposed upon them.

In addition to the Evening Classes held in the Schools, a fair amount of day work has also been carried on. Day Trades Preparatory Schools have been conducted at Belfast, Derry, Ballymena, and Portadown, those at Derry and Ballymena being new. Very good work was done in the first three, but the number in attendance at Portadown was too small. The Day Technical School at Belfast was again small, but it contained some good material and was efficiently taught. Its value, providing as it does a wider and more complete training for those who should eventually become the managers and leaders of industrial concerns than can possibly be secured in Evening Classes, has not yet been adequately realised. Numerous Domestic and some Commercial classes have also been held, but the attempt to obtain Day Apprentice Classes still meets with little response from employers. Classes for engineering apprentices at Belfast and Portadown are all that have yet been obtained. Special classes for the further training of National Teachers continued to be in great request. The demand for Science Classes of this type has naturally diminished, but Domestic Economy, Art, and Language Classes have been largely availed of.

#### COUNTY SCHEMES.

Each of the nine Counties in Ulster again conducted a Scheme of Technical Instruction.

The Armagh and Down Schemes dealt solely with the Rural Districts. All the others dealt in addition with the smaller Urban Districts within their area and were conducted by Joint County and Urban Committees. The Antrim Scheme was re-organised. A Joint Committee representing Ballyclare, Portrush, and the County, was appointed and Technical Schools were opened in the two Urban centres and Antrim. Funds for the Antrim School were provided by the striking of a  $\frac{1}{2}$ d. rate over the Rural District of Antrim, in addition to the rate struck over the County at large. The Scheme was placed under the direction of a Principal. As the larger Urban Districts in the County, with the exception of Lisburn, have all Schemes of their own, it will be seen that the whole County is now well provided for. The same may be said of the counties Fermanagh, Londonderry, Monaghan and Tyrone, but in the case of Monaghan the organisation of the schools suffers from the want of a responsible Principal.

The distribution of the County Technical Schools will be seen from the following table:—

County.	Number of Schools under the Joint Committee.]		
Antrim, ..	..	..	3
Fermanagh, ..	..	..	1
Londonderry, ..	..	..	2
Monaghan, .	..	..	3
Tyrone, ..	..	..	4

The work done in these Schools is considered under the heading "Technical Schools," but it should be here pointed out that a large number of young farmers make use of the schools, and there is a strong desire on the part of the Managers to provide courses specially suited to their needs. The work so far attempted consists chiefly of Woodwork, Building Construction of a simple type, suitable for application to farm requirements, and Rural Arithmetic. To these it will be necessary to add Metalwork, Rural Economy, and a course of Business Methods dealing with farm accounts, correspondence and commercial transactions.

It should also be mentioned that the usefulness of the Training School for Lace and Sprigging Teachers, conducted in connection with the Ennis-



killen Technical School, has been increased in the past session by the provision of Scholarships open to students from any County. These Scholarships were provided by the Department and succeeded in attracting to the School students from a very wide area.

In addition to the work done in the Technical Schools, a large amount of useful instruction has been given in Itinerant classes. The distribution of the classes is set out in the following table :—

COUNTY.	Number of Courses given in				Total.
	Manual Instruction.	Domestic Subjects.	Drawing.	Commerce.	
Antrim, . . . . .	2	8	—	—	10
Armagh, . . . . .	5	6	—	—	11
Cavan, . . . . .	10	8	—	—	18
Donegal, . . . . .	3	11	—	—	14
Down, . . . . .	4	10	—	—	14
Fermanagh, . . . . .	5	4	—	—	9
Londonderry, . . . . .	2	4	—	—	6
Monaghan, . . . . .	10	5	—	—	15
Tyrone, . . . . .	2	2	2	2	8
	43	58	2	2	105

It will be seen from the table that the number of courses given in the Rural Districts of Londonderry and Tyrone was small, but provision is being made for increasing the number in the coming session.

The instruction was given by thirty whole time teachers, of whom twelve were also employed in the County Schools.

The afternoon classes in Manual Instruction were attended chiefly by National School pupils who were given a course of woodwork on educational lines. Some difficulty has been experienced in obtaining full classes in the afternoon. The evening classes, on the other hand, were almost without exception well filled, and in some cases the demand was so great that applicants had to be refused admission. The students consisted mainly of farmers and labourers. In the early lessons a number of the commoner and more useful joints were constructed, and, when a sufficient training in the manipulation of tools had been secured, useful articles for farm or home purposes were begun.

The attendance at Domestic Economy Classes was not as regular as could be desired, and the tendency shown by a few of the teachers to allow their classes to dictate the line of progress resulted in ill-graded courses and instruction in unsuitable exercises. On the whole, however, the work has been satisfactory.

The accommodation for Itinerant Classes has been generally satisfactory. The use of National Schools has been in most cases avoided owing to the many disadvantages connected with them, but there are undoubtedly districts in which it is impossible to secure suitable rooms. To meet the difficulty, the Armagh Committee have constructed a portable house which it is intended to use for such centres. By conducting a succession of Woodwork and Domestic Economy courses in the same district it is expected that it will not be necessary to remove the building more than twice a year. The experiment will be watched with much interest and may lead to the solution of a real difficulty.

In some Counties—notably Cavan and Down—sufficient use has not been made of Local Committees. The experience gained in other Counties shows that these Committees can be of the greatest service in

arousing interest before the opening of the classes, in assisting to make arrangements for them, and in stimulating regular attendance. Where a good local Committee has been formed, the students are found to join the classes at the beginning and to attend regularly.

Industries Classes have been conducted in five Counties. Their distribution will be seen from the following table :—

COUNTY.	IRISH CROCHET LACE. Number of Centres.	SPRIGGING. Number of Centres.	Total.
Cavan, . . . . .	7	—	7
Donegal, . . . . .	5	5	10
Fermanagh, . . . . .	8	6	14
Monaghan, . . . . .	8	—	8
Londonderry, . . . . .	—	2	2
	28	13	41

The classes in Londonderry were new ; those in Cavan and Fermanagh have made good progress, and in at least 13 of the centres the industries have taken root and are in a flourishing condition. In Monaghan, too many classes have been conducted to enable the teachers in charge to devote sufficient attention to each. In Donegal the classes have been treated very much as itinerant classes, and little care has been taken in the selection of centres ; the result has been a very small output for the expenditure, and little improvement is to be expected until a definite and well-considered policy is adopted. The experience gained in Fermanagh and Cavan shows that under the system now in operation, valuable little industries can be built up under capable management. In the best classes, substantial balances have been accumulated with the result that the workers can be paid ready cash for their work ; by this means the industries are enabled to hold their own successfully against " trucking."

#### SECONDARY SCHOOLS.

Seventy-eight Schools in Ulster followed the Department's Programme for Secondary Schools. Of these, 33 were Boys' Schools, 30 Girls' Schools, and 15 Mixed Schools. All except seven were Intermediate Schools, five of the seven being Day Trades Preparatory Schools.

The second year course was taught in 73 Schools, and the other courses taken may best be seen from the following table, which shows the number of Schools in which the various courses were taught :—

COURSE.	3rd Year.	4th Year.	Auxiliary to 1st and 2nd Year.
Chemistry, . . . . .	25	7	—
Physics, . . . . .	20	10	—
Botany, . . . . .	11	10	—
Physiology and Hygiene, . . . . .	6	5	—
Mechanics, . . . . .	5	—	—
Drawing, . . . . .	29	13	—
Domestic Science (Aux.), . . . . .	—	—	9
Domestic Science, . . . . .	9	7	—
Manual Instruction (Aux.), . . . . .	—	—	10
Manual Instruction, . . . . .	3	—	—

These figures show that there is an increase in the number of schools taking the Chemistry Courses, and an almost corresponding decrease in the number taking Physics. Manual Instruction and Domestic Science are not as widely taught as they should be. In the case of the former subject, its non-recognition by the Intermediate Board acts prejudicially to it. Most of the Schools depend very largely on fees and grants for their maintenance, and the grants paid for Manual Instruction and Domestic Science, being on a lower scale than science subjects, are considered by the schools insufficient.

The Fourth Year Physics Course A., dealing with Wave Motion, Sound, and Light, has not been seriously taken up in the District, only two schools attempting it at all. The Mechanics Course is taken in the Day Trades Preparatory Schools, but not elsewhere except in two cases, and the introduction of mechanics into the Third Year Physics Courses makes it unlikely that there will be any increase in its popularity.

The efficiency of the teaching may be judged from the fact that while numerous classes received increased grant for conspicuous merit, it was only necessary to reduce the grant for inefficiency in the case of five classes, viz., one in Introductory Physics, one in Fourth Year Physics, one in First Year Drawing, and two in Manual Instruction. This result shows that the general level of the instruction is now satisfactory, and that many successful efforts have been made to secure excellence. The defects which still exist are mainly due to the inexperience of new teachers. It is, however, also true that some of the more experienced teachers neglect to keep their minds fresh and consequently allow their instruction to become stereotyped and uninteresting. Generally speaking, it may be said that the courses are logically developed, and that the spirit of inquiry is kept well to the front. On the other hand, a somewhat narrow view of the courses is taken by many teachers who neglect to consider laboratory observations in their relation to everyday experience and practical applications. Further, the historical development of the sciences has received scant attention; where history has been considered at all, it has generally been taken as something dissociated from the actual work of the classes.

The Botany Courses require special mention because of the fact that their nature renders them liable to very diverse treatment. Unfortunately, some of the teachers are content to obtain a number of somewhat minute examinations of plants and flowers without much consideration of the conclusions to which the observations point and also without much comparison of characteristic similarities and differences of structure. The results are that the faculty of deduction is not sufficiently cultivated, and that a very uncertain basis is laid for classification in the Fourth Year. Few of the Schools have made satisfactory provision for the study of growing plants under normal conditions and the deferring of Plant Physiology until the Fourth Year leads to want of clearness of conception regarding vital processes.

#### PRIMARY SCHOOLS.

Twelve Primary Schools followed the Department's Programme of Drawing, two of these taking up the work for the first time. In eight of the schools the award, "excellent," was given; in the four remaining ones the standard was "good." It may be said, generally, that notwithstanding many difficulties the progress made in these schools is surprising and highly creditable. Four of the schools took Manual Instruction in addition to Drawing, and three of these secured the award, "excellent."

MR. McCaffery, *Inspector for the South Central District*, reports:

#### COUNTY SCHEMES.

The schemes for administering the Technical Instruction Act in the county areas of this district remained as they were in the preceding session.

In this section of the report it is proposed to deal with the work of the schemes in non-urban areas only, leaving the organised technical schools, which are controlled by Joint Committees, to be dealt with in another. The operations of the schemes comprise (a) Scholarships, (b) Itinerant Instruction, and it will be convenient to consider them under these headings; but before doing so it will not be amiss to indicate one direction in which further development of county scheme work is desirable.

There are a number of thriving business centres such as Gorey, Callan, Bagenalstown and Tullow, with populations ranging about 2,000, and which are therefore sufficiently important to have small permanent technical schools in which might be given instruction in elementary commercial subjects as well as in the subjects usually taught by the itinerant instructors. Hitherto it has not been possible to cater for the particular needs of such towns, but with attendance grants available for instruction under the provisions of the Revised Programme, County Committees may well be expected to give greater attention to the peculiar needs of small towns in the future. The first step will naturally be to secure permanent and suitable accommodation for the classes, but this should present no serious difficulty where the people of the locality are prepared to co-operate with the county committees. Something has already been done in this direction in smaller centres than those named, for instance, permanent class accommodation has been secured in Ballyragget with a population of only 500, and plans have been approved for a small technical school for Baltinglass with a population of 900.

#### (a) *Scholarships.*

Boys' scholarship schemes were in operation in the counties of Kilkenny and Carlow. The scholarships awarded under the Kilkenny scheme are tenable only in the Kilkenny Day Trades Preparatory School, and for this session twenty of them were provided at a cost to the scheme of £134. A fair proportion of the scholars continue in attendance until their three year course is completed. When the committee first decided to award these scholarships it was feared that scholars coming from a distance might experience some difficulty in finding suitable lodgings in the urban district, and accordingly steps were taken to render assistance where it might be required. The scheme has been in operation a number of years but the country boys appear to find no difficulty in securing suitable lodgings. At any rate, no request for aid in the matter has hitherto reached either the Chairman or Secretary of the Committee from any scholar about to enter the Day Trades Preparatory School.

The Carlow scholarships for boys were tenable at approved secondary schools. During the session £160 was expended in providing nineteen first year and five second year scholarships. By a recent regulation of the Department no more scholarships can be awarded under the old conditions, but the Committee have as yet shown no inclination to adopt the new scholarship scheme.

Domestic Economy scholarships were awarded under the Wexford and Carlow schemes. Under the former there were awarded, on the results of a locally conducted examination, seven scholarships, all of which were held in the Kilmore School of Domestic Training in the south of the county. Ten scholarships were awarded by nomination under the Carlow scheme. Of these, three were held in the Moate School, and seven in the Stradbally School in Queen's County. The great bulk of the county scholars return to their homes on the completion of their course of training, and only occasionally does one become a domestic servant.

#### (b) *Itinerant Instruction.*

The officers directly responsible for organising the work of the schemes in rural areas are whole time teaching Principals in Wicklow, Kilkenny, and Kildare, whilst in Counties Carlow and Wexford the officers are Secre-

taries who are responsible also for the organisation of the work of the Agricultural schemes. In all the counties, however, the details of the work are usually attended to by the itinerant teachers themselves, whose teaching duties have been limited so that they may have sufficient time for the purpose. Where these teachers lack energy and enthusiasm, or where they are not efficiently directed and supervised, the organisation leaves much to be desired. In the work of organisation itself there has been considerable slackness. Organising officers and itinerant teachers visit localities, view premises and interview local people about arrangements without taking adequate notes or making reports sufficiently exhaustive for immediate use or future reference. It is not, therefore, surprising that there are sometimes long delays in preparing premises in new centres for the reception of classes; that repairs to premises frequently bear witness to the looseness and incompleteness of the specifications on which they were carried out, and that classes have sometimes to be opened before they have been sufficiently advertised. Such things were unavoidable in the early days of the schemes, but after the experience of years and with the sum of the difficulties to be overcome in a session a diminishing quantity, they are no longer excusable.

A course of instruction in a temporary centre usually extends over sixty hours and involves thirty two-hour lessons. This arrangement provides students in a rural district with the opportunity of following a course of instruction in the syllabus selected equivalent to one given during an ordinary Evening School session in an organised urban technical institute, and has obvious advantages, e.g., it tends to thoroughness in the work of the courses and, by establishing a degree of uniformity, facilitates organisation and development. There has been a tendency to shorten unduly the courses conducted by certain instructresses in Wicklow, Wexford and Kildare.

The itinerant teachers are expected to give instruction for not less than twenty hours a week. This amount of teaching may seem small, but where the preparation of lessons occupies much time, or there is travelling to be done, it represents a reasonable amount of work. There is, however, a general inclination to regard the minimum as a maximum, even under the most favourable conditions, whilst in some of the domestic economy courses in Wicklow conducted under conditions presenting no unusual difficulty, the amount of teaching required from the instructress has been persistently cut down below the minimum. In some Manual Instruction centres where a junior class could not be formed some difficulty has been experienced in keeping the instructors fully occupied. The problem has been partly solved in some remote centres by arranging to hold three-hour lessons on six days a week.

The syllabuses of instruction usually followed in the courses in rural districts up to this have been—two in woodwork and technical drawing (one being for juniors, the other being for adults), one in cookery, housewifery and hygiene, and one in needlework and laundry-work. In many of the centres visited by the Instructors during the session students were enrolled for their second or third course in the same subject, yet it was found that, with a few casual exceptions, these students were required to work through the same syllabus which served first course students. As time goes on the number of students capable of working through advanced syllabuses will become more numerous. It is, therefore, evident that the work carried on in county areas has already sufficiently developed to render necessary the adoption of two-session syllabuses for cookery, needlework and woodwork, and the keeping of careful records of the attendance and progress of each student in each subject of instruction. To facilitate this important and necessary work an admission register should be provided for each centre and a work register for each class. These should be kept written up to date by the instructors during the courses, and, at their close, filed by the organising officer for future use.

The students attending instruction in rural centres are generally of good type. In some centres, and especially where the classes have been small,

the older pupils of the local National Schools have been admitted to classes meeting outside of school hours. Though this may be permissible under the general conditions of the scheme, it may be reprehensible on humanitarian grounds and should not be done without consideration of the circumstances of each case. By their attendance at technical classes National School pupils have sometimes been deprived of any opportunity of obtaining a substantial meal until a late hour in the evening. Such deprivation is harmful to their health, and may lead to serious results. Pupils attending day schools should not be allowed to attend outside of school hours more than one technical class in the day, nor should they be allowed to attend such a class until they have taken the chief meal of the day and been at least two hours out of school.

Except in Wexford and Wicklow there has been a marked falling off from the activity displayed in the two previous sessions in opening up new centres of instruction. In Wexford this work is proceeding steadily; the pace continues distressingly slow in Wicklow. Some diminution in the number of new centres opened was to be expected in Carlow and Kilkenny where good progress has been made in this direction in former years. The places deriving benefits under the system of itinerant instruction for the first time during this session numbered fourteen, of which six were in Wexford and two were in each of the other counties. The way in which this work has progressed during the last three years is shown in the accompanying table:—

SUMMARY OF NEW CENTRES OPENED IN LAST THREE SESSIONS.

COUNTY.	Number of new centres opened.		
	In 1908-9.	In 1909-10.	In 1910-11.
Carlow, . . .	6	4	2
Wexford, . . .	9	7	6
Kilkenny, . . .	8	9	2
Kildare, . . .	3	8	2
Wicklow, . . .	1	2	2
	27	30	14

During the session the manual instructors have visited twenty-nine centres and conducted forty-eight thirty-lesson courses in woodwork and technical drawing. The courses were distributed amongst the counties as follows:—Kilkenny, 15; Carlow, 9; Wexford, 9; Kildare, 2; Wicklow, 7. The total is eight more than in the preceding session, the increase being mainly due to more energetic organisation.

The instructresses have visited thirty-eight centres and given the equivalent of eighty-four complete thirty-lesson courses in domestic economy subjects. The courses were distributed amongst the counties as follows:—Kilkenny, 22; Wexford, 24; Carlow, 21; Kildare, 11; Wicklow, 6. The total is three less than in the preceding session, the decrease being mainly due to the increased attention given to urban centres in Kildare which withdrew two instructresses from rural work for a considerable part of the session.

The foregoing facts are arranged in the accompanying table and set aside by side with the corresponding figures for the session 1909-10. It may be taken for granted that with the existing staffs it is scarcely possible to cover more ground in a session than that indicated, but that increased attention to organisation can improve the conditions under which the work is carried

on, and help to render the instruction more progressive and the training given more thorough—especially in the domestic economy courses.

SUMMARY OF THE WORK DONE IN TEMPORARY CENTRES IN 1909-10 AND 1910-11.

COUNTY.	1909-10.				1910-11.			
	No. of centres visited.	No. of courses given in		Total No. of courses	No. of centres visited	No. of courses given in		Total No. of courses given
		*M.I.	†D.E.			*M.I.	†D.E.	
Wicklow, .	5	7	5	12	6	7	6	13
Wexford, .	13	6	22	28	13	9	24	33
Kilkenny, .	20	13	22	35	19	15	22	37
Carlow, .	14	9	20	29	12	9	21	30
Kildare, .	15	6	18	24	11	8	11	19
Totals, .	67	41	87	128	61	48	84	132

\* A course of Manual Instruction consists of 30 two-hour lessons in wood-work and drawing.

† A course of Domestic Economy may consist of 30 two-hour lessons in either cookery, housewifery and hygiene, or laundry work and needlework.

URBAN DISTRICT SCHEMES, INCLUDING TECHNICAL SCHOOLS IN COUNTY AREAS.

The chief obstacles in the way of any marked extension of the operations of the schemes in the urban centres of this district are the difficulties connected with the provision of suitable accommodation, and the local scarcity of qualified teachers to meet the growing needs of the developing schemes. Good progress has been made in overcoming the accommodation difficulty; for instance, new and commodious technical schools have been erected recently in Enniscorthy and New Ross, and the plans have been approved for another for Arklow; but the liabilities incurred in carrying out the works already completed will retard, to a certain extent and for some time, the development of the schemes in the centres concerned. The inadequacy of the accommodation in Kilkenny has been felt for many sessions. The classes continue to meet in three separate buildings from one of which they are liable to eviction two or three times during the session. The long delay in taking steps to erect a new school in this important town is in some measure due to the difficulty of finding a suitable site.

The staffing difficulty is not less serious than that of accommodation, and there is not an urban centre in the district which has not experienced it. In some cases the committees have, by arrangement, secured part of the services of whole time officers employed by other committees; thus the Enniscorthy committee have, since the inception of their scheme, been entirely dependent on the services of visiting teachers employed by other authorities, and the Wexford committee have similarly depended on the county itinerant teachers for instruction in domestic economy and building trade subjects. In other towns, teachers resident at a considerable distance

have been engaged for one or two evenings a week ; in this way has been carried on the teaching of art subjects in Bray, Arklow, and Wicklow, and the teaching of commercial subjects in Naas and Carlow. In all these cases, and more or less irrespective of the efficiency of the teachers, the results have left much to be desired. Matters are, however, gradually righting themselves. Committees generally are arriving at a fuller sense of the desirability of having their teachers resident in the locality, and this on the score of efficiency as well as from considerations of economy ; and those committees who have hitherto lent part of the services of their whole-time officers to other authorities are finding it necessary to retain them altogether to meet the increasing demands for instruction in their own areas. Hence we find the Enniscorthy and New Ross committees appointing new local teachers of preparatory course subjects and placing the work of their respective schemes under expert teaching principals, the Wexford committee deciding to employ a whole-time instructress in domestic economy, and the Kilkenny committee advertising the fact that a local teacher of book-keeping will be appointed as soon as one holding the necessary qualifications is forthcoming. Much good would be done if other committees followed the example of the Kilkenny committee in this respect, and made known more widely the local needs. Possible local candidates would thus be stimulated to seek information regarding the qualifications required and the steps to be taken to obtain them.

Experience has shown that the success of a Technical Instruction scheme in an urban district depends in the first place and mainly upon the energy, enthusiasm and ability of the principal, who is responsible for organising the classes, advising and stimulating students and energising the staff. Whenever a principal displays traces of inefficiency or flags in his efforts, the results are soon visible in the work of the school. Experience also teaches that a commodious and well-kept central institution exerts considerable influence upon the number of students enrolled for instruction and upon the regularity of their attendance. But for the case of Carlow, it would be unnecessary to make such trite remarks. The Carlow committee have no principal, nor have they a local organiser capable of developing the work of the scheme in the urban district. They are also without the right of exclusive use to any premises. In so far as it refers to the urban area, the scheme is therefore without a local head, and without suitable headquarters. The work carried on, though not unsatisfactory in some respects, is wanting in the coherence and continuity which should be its distinguishing features in an important centre of population. There is, it must be added, no immediate prospect of improvement, for the committee are slow to recognise the difference between technical classes depending entirely on the members of a local committee for organisation and supervision, and an organised Technical School conducted under an expert principal.

The influence of the Department's Programme for Technical Schools, etc., in securing increased efficiency in the working of the schools has been brought out in many ways during the session. The specialised courses having been planned in previous sessions, and being now more or less settled, it became possible to deal more fully with the syllabuses in use. These have been to a large extent carefully revised and co-ordinated during the session, and the labour expended on them cannot fail to bear fruit in future sessions. The inquiry into the qualifications of students entering upon approved courses of study, necessitated by the regulations, has resulted in the discovery that principals have not always given adequate attention to the drafting of students' application forms, to the verification of the particulars entered thereon, or to the keeping of the admission register written up to date. When, as happened occasionally, it became necessary to make inquiries concerning the progress of individual students, it was found that comparatively little attention had been given to the recording of the progress of students other than those who had sat for external examinations. Few of the teachers have yet realised the value of an accurate record of the marks awarded to students for home work and class work, and few principals have appreciated the necessity



for a sessional school examination to gauge the progress of students in the syllabuses actually taught, so that trustworthy records may be compiled for future reference. In several schools, cases came to light of students having been promoted to a higher stage of a course without having mastered the work of the preceding one. Such unmerited promotions work much injury to the individuals directly concerned, and are in no way beneficial to the school. The working of the Programme in the future will tend to remedy such defects in organisation as they arise.

The total number of qualified students pursuing their studies in approved groups of subjects has increased during the session from 25.3 to 26.9 per 5,000 of the population in the urban areas of the district. The proportion of group-course students to population in an urban centre provides a ready, and in the main, trustworthy means of gauging the efficiency of the local technical school. Judged by this standard, the schools in Athy, Naas and Wexford are found to be seriously wanting, the Schools in Arklow and New Ross to have received careful attention, and the schools in Wicklow and Enniscorthy to have been excellently organised. The Kilkenny evening technical school showed a marked improvement in general efficiency during the session, but the results are, on the whole, still below the average.

The importance of a good preparatory course is becoming more generally recognised, but the organisation and teaching of this course must receive more care and attention before it can properly fulfil the purpose for which it was established, viz., the fitting of students to take up a specialised course of technical instruction. The entries to the preparatory course classes have not been properly controlled in several of the schools. Pupils still in attendance at day schools have been enrolled with students who have been absent from school, and in many cases at work, for a more or less extended period, and whose knowledge of the rules of grammar and arithmetic has, therefore, become dulled or dormant. In the early stages of the course the teacher usually fails to realise his responsibilities in regard to the older, and generally shier and less demonstrative students, and, choosing the line of least resistance, so to say, builds upon the already known or easily discoverable knowledge of the day school pupils and addresses his remarks mainly to them. In doing so, he inadvertently but surely sets up a comparison between the two sections of the class. The average ordinary student soon begins to feel that the class does not meet his needs and frequently withdraws from the school altogether at an early stage of the session. Such a student can scarcely be expected to risk a similar unpleasant and unprofitable experience in a future session. Sufficient has, perhaps, been said on this point to indicate the grave responsibility which committees assume in allowing day school pupils to be enrolled with adolescents in evening classes, and the danger they run of lessening the efficiency of their school in its proper work of providing technical instruction for ordinary students. Moreover, it ought to be remembered that if pupils are receiving due attention in day schools, there are other considerations which render their attendance at late evening classes undesirable, whilst if the case be otherwise, the remedy should be sought for in another direction.

Where the organisation of the preparatory course classes has been satisfactory, as in a few schools, the aims of the syllabuses have not always been realised in the teaching. In the English classes, for example, students are required to spend much time in correcting mistakes which they have not made, and in analysing sentences unconnected with the course of reading followed and therefore lacking in interest. Too much stress cannot be laid on the fact that the purpose of the instruction in English should be to train students to understand what they hear or read and to say with some degree of precision what they mean. Their future progress in study and their success in the business of life will depend largely upon their ability to give clear expression to their thoughts in written and spoken language, but this power they cannot acquire unless they are frequently practised in oral answering and judiciously aided and encouraged to attempt easy compositions.

The lessons in mathematics are not made interesting. Instead of taking up the study of mensuration in a simple and demonstrational way at the beginning of the session, teachers frequently plunge their students into the maze of vulgar fractions from which they do not emerge until the session is too far advanced to permit of the easier and more interesting portions of the syllabus being properly treated. In some cases this arises from slackness in preparation, whilst in others it would appear to proceed from a culpable ignorance of the aims of the syllabus.

The Day Trades Preparatory School has been continued in Kilkenny, and an all round satisfactory standard of efficiency has been maintained in the teaching, which closely follows the lines laid down for such schools in the suggested syllabuses. A teacher of physical exercises has been added to the staff. The number of candidates qualifying for scholarships at the entrance examination was small enough to indicate the danger of the supply falling altogether in the near future unless greater activity were displayed in making known the nature and value of the training given in the institution, and some effective step taken to secure the co-operation of the primary schoolmasters in the urban area. Without going into details it may be said that the outlook had distinctly brightened before the session closed.

Well considered prize schemes designed to promote regularity in attendance and diligence in study have been adopted and put in operation in all the organised technical schools of the district. They have had a beneficial influence upon the students, and, indirectly, upon the teachers also, by requiring of them increased attention to the recording of the students' progress.

#### SECONDARY SCHOOLS.

Omitting the Day Trades Preparatory School, to which reference is made elsewhere, there were thirty secondary schools inspected in this district during the session. Of these, seventeen were boys', eleven were girls', and two were mixed schools. Two boys' schools which had perennially experienced difficulty in finding qualified teachers of experimental science and drawing, took advantage of the opportunity afforded by the altered regulations of the Intermediate Education Board to discontinue the teaching of these subjects.

The first year courses in experimental science and drawing were taken in all the schools, and the second year courses in all but one. Manual instruction was taught as a first year subject in ten schools, and as a second year subject in eight schools, the corresponding numbers for the preceding session being thirteen and eight, respectively. The auxiliary course in domestic economy was taught, as in the preceding session, to first year pupils in five schools, and to second year pupils in four schools. The foregoing facts will be seen more clearly in the following

SUMMARY OF PRELIMINARY COURSE CLASSES.

SCHOOLS.	EXPERIMENTAL SCIENCE AND DRAWING.		MANUAL INSTRUCTION.		DOMESTIC ECONOMY.	
	First Year.	Second Year.	First Year.	Second Year.	First Year.	Second Year.
Boys',	17	16	10	8	—	—
Girls',	11	11	—	—	5	4
Mixed,	2	2	—	—	—	—
	30	29	10	8	5	4

Specialised courses were taken in all the girls' and mixed schools, and in all but three of the boys' schools. Three special courses were presented in one boys' and four girls' schools; two were presented in three boys' and six girls' schools; and a single course in the remaining schools. The number of schools taking up each of the specialised courses will be seen from the following

SUMMARY OF SPECIALISED COURSE CLASSES.

SPECIALISED COURSES.	BOYS' SCHOOLS.		GIRLS' SCHOOLS.		MIXED SCHOOLS.	
	Third Year.	Fourth Year.	Third Year.	Fourth Year.	Third Year.	Fourth Year.
Chemistry, . . .	10	2	—	—	1	1
Physics, . . .	3	1	—	—	—	—
Mechanics, . . .	2	—	—	—	—	—
Drawing, . . .	4	1	6	3	1	—
Domestic Economy	—	—	11	6	—	—
Physiology and Hygiene, . . .	—	—	5	3	—	—
Botany, . . .	—	—	3	1	—	—
Totals, . . .	19	4	25	13	2	1

The figures given in the foregoing summary do not differ materially from those for the previous year. The only points calling for mention are an increase of one in the number of boys' schools taking drawing and in the number of girls' schools taking botany, and the fact that domestic economy as a third year course was taken in all the girls' schools.

The standard of the work as a whole was quite satisfactory. Awards were made in respect of two hundred and seven classes conducted under the Programme. In sixty-seven per cent. of these the normal grant was recommended, in eighteen per cent. the grant was raised for conspicuous merit, and in fifteen per cent. it was reduced for defects of teaching or organisation or equipment.

There was a falling off in the efficiency of the introductory physics course in several girls' schools, owing chiefly to the fact that the subject was entrusted to novices in the art of teaching. A slight improvement was noted in the teaching of the same course in boys' schools, but the standard still remains below what it ought to be. The tendency to enrol unfit pupils in this course appears to be as strong as ever in boys' schools having primary departments attached, and is to some extent responsible for keeping down the standard of the work. A very fair level of efficiency was maintained in the introductory chemistry course and in the specialised courses in physics and chemistry. The teaching of the advanced courses in drawing in girls' schools was highly efficient whilst the work in the other courses not individually named was quite satisfactory and calls for no special remark.

#### PRIMARY SCHOOLS.

Examinations in Drawing were conducted in the primary departments of three girls' schools and twelve boys' schools. Seven schools presented pupils in Standard V., two in Standard VI., and two in Standard VII. Of the pupils entered on the schedules, 86 per cent. were presented for examination.

The girls' schools are all small (the average number of pupils examined in a Standard being only four), and all were classed as Excellent as in the

preceding session. The boys' schools are all comparatively large. The average numbers of pupils examined in the various classes were as follows:—Standard I., 37; Standard II., 36; Standard III., 32; Standard IV., 25; and Standard V., 13. Of these schools four were classed as Excellent and eight as Good. This classification indicates an increase in the efficiency of the instruction as compared with that for the preceding session, when three were classed as Excellent and two were only Fair.

Speaking generally of the Drawing in these schools it may be said that a high level of efficiency was reached in Standard II., and in the freehand drawing of Standards III. and V.; whilst, with the exception of the geometrical drawing of Standard V. (which is not, as a rule, well taught), the remainder of the work was good. The pupils of Standard I. worked on paper in all the girls' schools and in a third of the boys' schools.

MR. M'GANN *Junior Inspector (West Central District)*, reports:—

#### COUNTY SCHEMES.

The eight Counties of the West Central District had Schemes of Technical Instruction in operation; of these, four were administered by County Committees of Agriculture and Technical Instruction and four by Joint Committees of the urban and rural areas. Each made provision, by itinerant courses, for instruction in Domestic Economy and Woodwork, and, except in the case of the Clare Scheme, for instruction in Crochet Work either by the direct payment of teachers' salaries or by capitation grants payable to the managers of classes. The Schemes for Clare and Mayo made provision for expert instruction in Commercial subjects; those for Mayo, Galway, and Longford for the award of Boy Scholarships tenable at Secondary Schools, and that for County Westmeath for the maintenance of a Technical School at Mullingar, and the award of Girls' Scholarships tenable at Residential Schools of Domestic Economy.

The classes in Domestic Economy and Woodwork held at rural centres were as satisfactorily attended as the claims of field work and the inclemency of the weather would permit. The progress made at Woodwork was very good, and the long courses given enabled the pupils, many of whom provided their own materials, to finish in a workmanlike fashion, useful articles for their homes and farmsteads. Practical instruction in Invalid Cookery, Simple Hygiene and Sick Nursing now forms an integral part of every course in Domestic Economy and the instruction is as efficient as existing circumstances allow. Near Loughrea, where thirty-two labourers' cottages were recently erected, an instructress took up her abode in one, furnished it inexpensively, and showed how, with the limited means at his disposal, a poor man's home might be economically maintained and tastefully kept. By simple lessons in her cottage, tactful advice and sympathetic visiting, she effected an admirable change in the neighbouring houses and their surroundings. The majority of the classes were, however, held in National Schools ill-adapted for instruction in Home Sewing and unsuitable for instruction in Cookery, Laundrywork and Housewifery. The scarcity of vegetables referred to in last session's report still continues, and in one county only has an effort been made to co-ordinate the work of the Horticultural and Domestic Economy teachers. Of the Crochet classes in operation during the session, not more than three can be regarded as progressive, and it is doubtful if even these will ever become self-supporting. The time of the pupils would be much more profitably spent in acquiring a knowledge of Simple Cookery, and the making, repair and adaptation of clothing.

Forty-two boys held Secondary School Scholarships and made satisfactory progress in the courses of study followed. Although the Scholarships have signally failed in the object for which they were intended, they have been productive of good, and have given abundant proof of the advisability of affording the poor but brainy boy facility for climbing the rungs of the educational ladder. The amended scheme, which restricts the Scholarships to pupils prepared to follow in approved schools courses of

study specially designed to fit them for industrial careers, and provides for their maintenance during the period of apprenticeship, has already been adopted by six committees. It affords an easy passage from the Primary School to remunerative employment, will secure the best recruits for manufacturing establishments, and eventually lead to the foundation of local industries.

At the Mullingar Technical School, Preparatory Course, Building Trade, and Commercial Classes were efficiently conducted, and, notwithstanding the very bad approach and indifferent accommodation, the attendance was fairly good. At the Moate Residential School of Domestic Economy the accommodation was improved, and the high standard of efficiency reached last year was well maintained.

#### URBAN DISTRICT SCHEMES.

The urban districts of Athlone, Galway and Sligo had independent schemes in operation. At Athlone, some improvement was effected in the accommodation for commercial classes, and the appointment of a specially qualified teacher of commercial subjects as headmaster led to increased attendance and efficiency in this section of the school. In the Trade section, the attendance at the Manual Instruction classes was fair, and the progress made good, but few pupils availed of the instruction in Carpentry and Joinery, although the teacher was a capable and zealous instructor. The paucity of pupils in this and the Domestic Economy section calls for the serious consideration of the Committee and energetic organisation on the part of the Principal.

At Galway, although the accommodation was inadequate and the funds limited, ten teachers were employed and classes opened in a wide range of subjects. The best type of pupil was not attracted to the Institute; in the majority of the classes the instruction was, of necessity, of an elementary nature, and, in some, owing to the low standard of the general education of the pupils, it was merely mechanical. Towards the close of the session, a new Principal was appointed, and it was decided to re-organise the staff and curriculum. To ensure success a new building must be provided—the old house is uninviting, the class-rooms are small and badly furnished, the kitchen is ill-suited for purposes of instruction, and the Manual Instruction and Trades class-rooms are low and badly ventilated attics.

At Sligo, a Day Trades Preparatory School, an evening Technical School, and Teachers' classes in Experimental Science, Drawing and Domestic Economy were maintained. Although the teaching was efficient, the courses suitable and well-designed, and the progress of the pupils satisfactory, no improvement was effected in the number or type of pupils admitted to the Trades School, and the results achieved were not commensurate with the expense incurred. It is, however, hoped that the award of Technical Scholarships by County Committees will augment the numbers and raise the standard of general education of the pupils seeking admission. The evening Technical School made steady progress. The Commercial section was well attended and excellently taught. The attendance at the Manual Instruction and Trades Classes so increased as to necessitate additional accommodation. The Home Sewing and Dressmaking classes were fully appreciated. A useful and well-attended series of lessons in simple cookery was given in the suburban district of Forthill. The attendance at the Art and Domestic Science Classes was unsatisfactory, and the painters were not induced to join the Drawing classes and thus fit themselves to take full advantage of the course of expert instruction provided in Lettering, Designing, Inlaying, etc. The teachers' classes were freely availed of, and the progress made in Drawing was good, but the instruction in science was interrupted by the resignation of the teacher and delay in appointing a successor.

In the urban districts of Ballinasloe, Ballina, Westport, Castlebar, Longford, Granard, Ennis and Kilsesh, instruction was provided by Joint Committees of the urban and county areas. At Ballinasloe, Preparatory,

Commercial, Trade and Domestic Economy classes were efficiently conducted in a dwelling-house, suitably equipped, but too limited in size. The Preparatory and Commercial classes were attended by pupils of a desirable type, but the numbers in the Trades and Domestic Economy classes were small. Teachers of Domestic Economy, Trades and Commercial subjects conducted classes twice weekly at Ballina, Castlebar and Westport. Much difficulty was experienced in providing accommodation and the temporary provision made is costly and unsatisfactory. A good beginning was made in instruction in Book-keeping and Business Methods, but at Westport the majority of the pupils were not of a good type. The Manual Instruction classes were satisfactorily attended by boys, but at none of the centres were artisans found to avail of instruction in Building Trades subjects. The attendance at the Domestic Economy Classes was fairly satisfactory, and the instruction was efficient. At Longford and Granard, classes in Crochet work were aided by capitation grants paid to the managers, but the number of learners was small, the receipts were poor, and the prospect of establishing industries is remote. Instruction in Domestic Economy and Woodwork was given at both centres. At Ennis and Kilmish, instruction in Commercial subjects was given by an expert. The classes were held after school hours in the local national schools. At Ennis, the pupils were of a satisfactory type, attended punctually and made good progress. At Kilmish the evening class was poorly attended, and the night class only fairly. Successful courses in Cookery were given at both centres in the well-equipped kitchens attached to the convents, and at Kilmish an excellent class in Home Sewing was aided by capitation grants paid to the managers.

#### SECONDARY SCHOOLS.

During the session two new Secondary Schools, provided with good composite laboratories, adopted the Department's Programme. The Preliminary Courses are now taught in twenty-eight Secondary Schools in this district. Of these, eight give instruction in the special course of Physics, eight in Chemistry, three in Drawing, two in Mechanical Science and two in Physiology and Hygiene. Four of the six Girls' Schools give instruction in Domestic Science, and twelve of the Boys' Schools make provision for the teaching of Manual Instruction.

The laboratories are, on the whole, well kept; the equipment has been satisfactorily maintained, improvement has been effected in the arrangement of apparatus and unlabelled bottles of materials are now rarely met with, but in schools without Manual Instruction rooms, benches for the making and repair of simple apparatus are not often provided, many laboratories are not yet supplied with clocks, and few contain, ready at hand, such simple fire extinguishers as a roll of wet blanket and a bucket of sand.

The standard of efficiency reached last year in the teaching of Science has been well maintained. In only three cases was it found necessary to reduce grants for inefficiency, and these occurred in the First Year Preliminary Course. The tendency to admit to this course pupils weak in Arithmetic and English still continues, and cannot be too strongly deprecated; with them too much time has to be given to mensuration and the wording and writing of records. Where also the minimum time only is given to Science, the First Year syllabus is not finished in the session, and progress in the succeeding courses is seriously hindered. The Department's Regulation, which, on educational grounds, permits pupils to repeat a course is not sufficiently availed of in this year—the exigencies of the time table and classification in other subjects too often determine advancement. In the Second Year Preliminary Course and in the Special Course of Chemistry, the teaching is, on the whole, sound. The special course of Physics is satisfactorily taught, but in the treatment of Heat sufficient use is not yet made of every-day phenomena. The schools that took Mechanical Science did good work on correct lines, and those that took Physiology and Hygiene

dealt with the subject practically and successfully. During class hours the teachers work zealously and conscientiously, but, as pointed out in last session's report, sufficient time is not given to class and laboratory preparation, nor are note book records adequately and promptly revised. This may be sometimes due to pressure of work in other classes, but cannot be always so. Until Science teachers realise that more than half their work consists in preparation for demonstration and laboratory lessons and in the revision of pupils' records, further progress will not be made.

Improvement has been effected in the desk accommodation for Drawing, and the efficiency of the instruction has been increased by the careful preparation of schemes of work, collective teaching and the freer use of the black-board. In many of the schools the time given to the subject is not at all commensurate with its educational and practical value.

It is pleasing to record that Domestic Economy continues to be efficiently taught, and that each of the schools taking it was awarded the additional grant for exceptional merit.

Manual Instruction has been carefully taught, and creditable progress has been made in the making of models and in the making and reading of working drawings. It is to be regretted that the grants in aid of instruction in this subject offer little inducement to managers to retain it in the school curriculum.

The Higher School of Domestic Economy at Sligo gave a very satisfactory course of instruction in every branch of Housecraft, but the fees paid by the pupils do not suffice to maintain it.

#### PRIMARY SCHOOLS.

Nine Primary Schools provided instruction in Drawing under the Department's Regulations, but only four of these had classes in Model Drawing and Geometry. In ruler work and scale drawing, excellent progress has been made. The necessity for the adoption of carefully graded schemes of exercises in Free Drawing is not appreciated, and the limited accommodation available, and the style of desk with which the schools are furnished, militate against the efficiency of the instruction in Model Drawing. As previously reported, until the number of pupils receiving simultaneous instruction under each teacher is diminished a much higher standard of efficiency can scarcely be attained.

Three schools provided instruction in Manual Work in wood. Two of these received the award "Excellent," and one "Good." When the practical and educational value of the training given in the making and reading of working drawings, and the accurate execution of models in wood is considered, it must be regretted that the provision for the teaching of Manual Work is inadequate.

MR. INGRAM, *Junior Inspector (North Central District)*, reports:—

#### COUNTY SCHEMES.

The County Schemes include provision for instruction in Commercial, Domestic, and Woodwork subjects in permanent and temporary centres in the Counties of Meath, King's, and Queen's. In County Louth, Commercial Instruction was provided in the permanent centre but not in the temporary centres. No permanent centres for instruction in technical subjects have yet been established in County Dublin, the instruction being limited to Domestic Economy teaching in the temporary centres only. Counties Meath and Dublin provided instruction in Crochet Lacemaking; and in Queen's County, a number of Boys' and Girls' Scholarships were awarded.

The short courses of instruction in Commercial, Domestic and Woodwork subjects continued to be well supported by students; the regular attendances recorded in many centres in spite of the requirements of harvest and other important seasons, and also the progress and efficiency

attained by the students, showed clearly that there is a demand for the continuance of this work.

With the exception of County Dublin, the courses generally were well visited by those who interested themselves in the promotion of the work. The active co-operation of the Local Committee is a factor that invariably ensures the success of a course, and this was specially noted in the courses held at Killeigh (King's County), Mountrath (Queen's County), and Trim (County Meath). Commendable efforts have been made by the County Committees to obtain more suitable premises for the classes held in their respective areas, and there was some improvement on the accommodation provided during the session 1909-10. Except in King's and Queen's Counties, the number of centres in which it was found that only one class per day could be formed was very small.

Lace Classes were conducted in Howth, Navan, Kells, and Trim. The instruction given throughout the session was generally satisfactory, but the returns of receipts and expenditure for the year did not indicate that the classes would develop into self-supporting industries.

Scholarships for Girls were provided by the County Dublin and Queen's County Committees; the schools selected by the successful candidates were the Domestic Training Institute, Dublin, and the Stradbally Residential School, Queen's County. Very satisfactory courses of instruction in all subjects relating to house management were provided; and, at the conclusion of the session, the Scholarship holders gave evidence of possessing a competent knowledge in all branches of the curriculum.

Boys' Scholarships were offered by the Queen's County Committee only. The Scholarships were held at the Maryborough Christian Brothers' School; Roscrea St. Joseph's Monastery; Portarlington Christian Brothers' Schools, and Knockbeg College; where an Intermediate Education, which included a definite amount of time given to Mathematics, Science, Drawing, and Manual Instruction, was followed by the successful candidates.

The grant to the Woodcarving Class at Stradbally (Queen's County) was discontinued.

A special short course of instruction in Housekeeping was provided in a cottage at Mountmellick (Queen's County) for students who, through force of circumstances, could not attend either the Technical School or the short courses of instruction in Rural Centres. The interest evinced by the girls who attended, their general improvement in appearance and method, and the valuable nature of the instruction provided, combined to make this new departure in Domestic Economy Instruction a complete success. With this exception, no new features were provided by the County Committees of Technical Instruction; but the steady effort to bring the benefits of a technical training within the reach of every section of the Counties continued to be shown in a marked degree in Counties Meath, Louth, King's and Queen's, and to a more limited extent in County Dublin.

#### COUNTY BOROUGH AND URBAN DISTRICT SCHEMES, INCLUDING TECHNICAL SCHOOLS CONDUCTED UNDER COUNTY JOINT SCHEMES.

Owing to the non-compliance with certain requirements of the Department for the improvement of the organisation and administration of the Schools, the Scheme for Technical Instruction in the County Borough of Dublin was not approved until almost the close of the session. No grant, therefore, was earned on the attendances of the students at the classes provided.

Schemes of Technical Instruction were provided in the Urban Districts of Rathmines, Blackrock, Kingstown, Pembroke, and Drogheda. Increased efforts had been made in all these Schools to provide specialised instruction in those subjects which would have a direct bearing on, and would aid in the development of, the local industries. Although much yet remains to be done in this respect, it is satisfactory to report that the



Committees are contemplating the improvement of the accommodation and equipment of their Schools.

Technical Schools under County Schemes have been established at Dundalk, Navan, Maryborough, Tullamore and Birr. With the exception of Dundalk, which should be classified with the Schools mentioned in the above-mentioned Urban areas, these Schools did not provide a very extended series of courses. The staffs were in the latter cases very small, and the teachers were only present in their centres for two or three evenings a week. The administration and organisation of the courses and syllabuses, therefore, were tasks that were included in the duties of the Secretaries of the County Committees, since neither Principals nor Head Teachers could be provided. Owing to the smallness of the local industries in these towns, general courses of instruction in Commercial, Building, and Domestic subjects were provided. These courses extended usually over a period of two years, though it was found that the students of the Commercial subjects invariably returned for a third year of specialised instruction. In fact, the regular attendance and marked advance of the latter students in the smaller Technical Schools are the most remarkable features of this session's work.

Some improvement was effected in the preparation of courses and syllabuses, and also in the publication of prospectuses in time to be of assistance in guiding intending students to the most suitable courses of study. Principals generally gave more attention to the grouping of the subjects and the compilation of the syllabuses. On the whole, very good progress was made in the latter; but owing to the requirements of the Board of Education, Society of Arts, City and Guilds, and other examinations in certain subjects, too much was frequently attempted, with the result that the benefit accrued to the limited few who intended to take the examination at the conclusion of the session.

Only very slight improvement in the numbers attending the Preparatory Course has been effected. It has not yet been fully recognized that the functions of this course are to provide a suitable foundation for the more specialised training which is to succeed it.

In a few Schools, efforts were made to co-operate with the Local Day School authorities so as to secure the names of the pupils who had recently left or were about to leave these schools. The plan was, to a limited degree, successful; yet sufficient to show that, if systematically organised and carried out, it would result in procuring a regular source of students for the Technical Schools: a condition which would enable the Committees to arrange in advance for the instruction that may be required.

Although the larger Technical Schools provided, in nearly all cases, specialised courses of instruction in Commercial, Mathematical, Science, Domestic, Handicraft and Art subjects, each School continued to develop one such course in a more marked degree than other courses; thus Motor Engineering was the chief feature of the Ringsend Technical School; Commerce and Domestic Economy of the Rathmines Technical Schools; Engineering of the Dundalk Technical School; Science and Commerce of the Drogheda Technical School; and Domestic Economy of the Kingstown Technical School.

With the exception of the Leinster School of Irish, language teaching cannot be considered a feature of any of the Schools in the North Leinster district; and, although strenuous efforts have been made in some schools to establish Art Classes, only those held at the Christian Brothers' Novitiate, Dublin, and the Drogheda Technical Schools showed any sign of success or permanency.

Day Trades Preparatory Schools were continued at Ringsend and Blackrock; in the former school, marked general improvement was evidenced. The demand for the pupils who have followed the complete courses at these Schools showed how thoroughly employers have realised the value of the training given.

Little has been done in the direction of establishing School Libraries. A small number of books of reference has been purchased by some of

the Schools, but there appeared to be no desire to develop either this suggestion or the proposal to provide occasional lectures upon subjects of Scientific, Literary, or other interest.

#### SECONDARY SCHOOLS.

The total number of Secondary Schools (70) in the District remains the same as in the preceding session. The Inspection in these Schools was confined to Science, Drawing, Manual Instruction and Domestic Economy, and the generally satisfactory standard reported for 1909-10 was well maintained. In the special Science Courses preference was again given to Chemistry. The subjects chosen by the Schools are set out in the following table, along with the number of Schools in which the particular instruction was provided:—

Chemistry, ..	3rd Year Syllabus, 41 ; 4th Year, 11.
Physics, ..	" " 10 ; " " 4.
Botany, ..	" " 5 ; " " 2.
Physiology & Hygiene .	" " 5 ; " " 2.
Mechanics, ..	" " 5 ; " " 2.
Drawing, ..	" " 14 ; " " 3.
Domestic Economy, .	" " 12 ; " " 9.

Fourteen Schools provided Courses in the Auxiliary Course in Manual Instruction, of which ten followed the Second Year, and three the Third Year Syllabuses in this subject. Seven Schools provided instruction in the Auxiliary Course of Domestic Economy, of which five followed the Second Year, and one the Third Year Syllabuses of the subject. Of the 70 Schools, all except one satisfied the regulation for the earning of attendance grants, viz., to provide a Special Course in one of the subjects enumerated, or that the pupils following the Preliminary Courses should also attend the Auxiliary Course in Manual Instruction or Domestic Economy.

A better effort was made at the beginning of the session to ensure that only those pupils who had the necessary knowledge of Arithmetic and English should enter the Courses in Experimental Science. Wherever proper attention was paid to this matter, good progress was made by the pupils, and the First Year Syllabus was satisfactorily completed.

In the Special Courses, no marked improvement in the preparation of the lessons was noted. The almost general practice of allowing a teacher to proceed straight-away from a lesson in some other subject to the Laboratory, Workshop, Art Room, or Kitchen, without allowing adequate time for the preparation of apparatus, has militated, as in previous sessions, against efficiency—involving a loss of time on the part of the pupils, and a diminution in their interest.

A very satisfactory standard was maintained by the pupils who followed the Manual Instruction courses; but the neglect of this subject, to which attention was drawn in the Annual Report for 1909-10, was again manifest from the commencement of the session.

The numbers of pupils who repeated courses were:—406 Boys and 208 Girls, as compared with 394 Boys and 207 Girls last session. Of the former totals, 501 repeated the Introductory Courses and 113 the Special Courses.

#### PRIMARY SCHOOLS.

Drawing and Manual Instruction were the only subjects that were inspected and examined in these Schools. The pupils continued to show a keen interest in the instruction, and a very satisfactory standard of work was shown at the examinations. At some schools, however, sufficient care had not been exercised in the retention of the completed copy books, and in consequence some difficulty was experienced in following the improvement effected by any one pupil. The size of the classes in Drawing in Standards I. and II. still renders the work of teaching extremely arduous.

## SUMMARY OF ART INSPECTOR'S REPORTS.

## PRIMARY SCHOOLS.

Instruction in Primary Drawing, in face of manifold difficulties, maintains the useful work of previous years, and a general average degree of excellence prevails in the more elementary stages of free and mechanical practice. In the higher standards, free drawing from objects has been successful in a few schools only, and in the majority of instances has not been seriously attempted, chiefly owing to the unsuitability of the desk accommodation and the large numbers in the classes. Drawing to scale has been remarkably good. The desirability of substituting paper for slates has been constantly brought to the notice of managers, and it is hoped that slates as a medium for drawing will be entirely discarded in the near future.

## SECONDARY SCHOOLS.

Instruction in Drawing in Day Secondary Schools, more than any other section of the Department's activities in respect of Drawing and Art, continues to develop, and this gradual growth may be attributed to the increasing recognition of the value of the training and to the more earnest attention of teachers in the preparation of courses, and to more definite methods of instruction. The most satisfactory work has invariably been found in schools where teachers have drawn up courses to suit the pupils, and have relied less on published examples than on personal effort. It is to be regretted, however, that more marked individuality is not apparent among the courses in operation, and that fuller advantage has not been taken of the elasticity and freedom of the Programme in this respect. In drawing from objects, excellent work has been done in many schools, and a more intelligent use of the geometric models has led to increased interest and vitality in the study. Free drawing from the flat becomes more closely allied to pattern making and design, and serves as a medium for acquiring technical efficiency as well as a knowledge of simple ornament. A considerable portion of the available time has been devoted to geometry and mechanical drawing, and practical methods of treatment have been adopted with satisfactory results. The Special Courses have been successfully followed in a limited number of schools, and have proved a source of great interest and valuable study. Drawing from actual surroundings, which is a development of the practice from groups of objects, has given a certain pictorial aspect to the work which should be cultivated. In Design, the ornamental elements have been derived from natural forms, and the methods of procedure have encouraged originality to some extent, but there is still much room for improvement in this subject. The Special Courses form a link with the Schools of Art which has been more fully realised.

In general the directions in which improvement is looked for in the future are:—

- (1.) The provision of suitable desk accommodation for the teaching of Model Drawing. There are many schools still unprovided with single desks.
- (2.) The more general use of suitable instruments for Mechanical Drawing. There are still many schools in which drawing-boards and T squares are not in use.
- (3.) The teachers to improve their qualifications beyond the bare requirements of the Irish Secondary Teachers' Drawing Certificate. Though several teachers have done more advanced studies, the majority are satisfied when they have completed the certificate.
- (4.) The provision of more time for the teaching of Drawing, so as to be able to introduce more colour work, and to give more

attention to teaching pupils how to distinguish good from bad ornament, etc.

- (5.) The provision of good reproductions of works of Art for wall decoration and study. Very few schools, even those which have special Art Rooms, have made provision in this respect.

#### DAY TRADES PREPARATORY SCHOOLS.

Drawing in Day Trades Preparatory Schools, with very few exceptions, has been most satisfactory. The courses have been brought closely into line with workshop practice and requirements, and teachers have adopted the spirit and intention of the instruction in an admirable manner. In some schools the importance of concise methods of recording measurements in the preparation of dimensioned sketches was not fully realised: neglect to take suitable sections in many instances led to undue labour and loss of time. In a few of the schools, there is still a tendency to produce elaborate drawings of Solid Geometry exercises, without giving sufficient attention to the teaching of the principles of orthographic projection. The trades for which the courses were planned fall into two broad divisions, building and engineering, but it is hoped that instruction suited to other trades, such as painting and decorating, may be included in the scheme.

#### ART CLASSES IN TECHNICAL SCHOOLS.

These classes fill an important part in the schemes of Technical Instruction, their function being twofold. First, as a preparation ground for students who require a knowledge of drawing as an essential equipment to fit them for other courses; and second as courses in themselves in which training in the practice of art as applied to design, trade and manufacture is given, with supplementary instruction in the rudiments of pictorial art. In the first case, the instruction has been successful and valuable, and has been of material benefit to the progress of students in specialised technical subjects. The difficulty of dealing with classes composed of pupils of unequal abilities has been minimised to some extent by a sub-division of the classes into grades. In the second case, although the classes have been disappointingly small, the work accomplished shows much promise and talent. In some schools, consideration of local requirements in applied design has led to most satisfactory results, but this important point has not received adequate attention from Art Teachers. In some few centres excellent examples of craft-work, such as wood-carving, metal-work, or embroidery have been produced, and the opportunity afforded in the practice has developed direction and outlet for design. Unfortunately, the important relation of the craftsman and the designer has been inadequately realised, and the tendency to reproduce ready made designs has stultified the work and retarded progress. In pictorial representation, drawing in light and shade, and painting from still life have formed the bulk of the practice. In general, the teaching of Art in the more advanced classes lacks definite aim and intention, and is still too largely regarded as a series of subjects rather than a training in broad principles pursued along pre-conceived lines.

#### SCHOOLS OF ART.

The six Schools of Art in the country have in general continued to produce satisfactory work, and some excellent work has been executed in the three larger schools during the past year.

Up to the present, the syllabuses and courses of study carried on in these schools and classes have been largely influenced by the requirements of the Board of Education's Art Examinations and the National Competition. With regard to the latter, which gives the best students in our schools an opportunity of competing with the best students in all the schools of art and art classes in the Kingdom, our schools and art classes have always held a prominent place, and last year have gained a greater number of awards in proportion to the number of schools and classes competing, than was gained by the Schools in England and Wales.

The six Schools of Art and eight of the Art Classes sent 489 "works" for competition, and gained 2 National Gold Medals, 4 National Silver Medals, 8 National Bronze Medals, 19 National Book Prizes, and 30 Commendations: a total of 63 awards.

The works rewarded cover a large variety of subjects, including Modelling and Painting the human figure from life, and from casts. Designs for Lace, Crochet, Damask, Stained Glass, Metalwork, and Painted Tiles, as well as actual specimens of work in these Art Crafts, in addition to Studies of historic styles of ornament, Painting still life groups, Painting details of the human figure from life and from casts, Plant Studies from nature for the purpose of design, etc.

These results are extremely praiseworthy and creditable, more especially so when the paucity of industries and manufactures to which Art is directly applicable in this country is remembered. It is felt, however, that improvement would be effected and the usefulness of the Art Schools and Classes enhanced, by giving greater attention to the further development of Artistic Crafts, and to promoting the application of Art to those trades and industries in the practice of which a knowledge of Art is more or less essential, as well as to endeavouring to influence the artistic side of any societies in which Art work is carried on.

In the more elementary classes, a large number of students have attended for instruction in Drawing, and good work has been accomplished. The co-ordination of drawing and design in the early stages has enabled students to adapt themselves more immediately to the advanced classes; equal co-ordination in other subjects of study would tend to more rapid progress and economy of effort. In Design, attention has been given to practical methods, and the schools now possess established classes for instruction in various processes and for the reproduction of design in material. These craft classes are only slowly developing, and are deserving of far more encouragement than they at present receive. They give definite direction to the study of design, arouse interest, and serve to educate public taste in what is good and beautiful in craftsmanship.

The study of Historic Ornament has been conducted on somewhat improved lines, but is still too abstract in character, and deals with the culmination of styles without stimulating enquiry into their growth or evolution, or influencing, to any great extent, the cultivation of the creative faculty in design.

Drawing may be from a pictorial aspect may be assumed to begin with drawing from objects, and to continue through a series of subjects to the practice of drawing from the living model. In drawing from objects, isolated examples or groups have been selected as a rule; drawing from objects included in actual surroundings has not been so frequent. In the intermediate subjects of drawing from casts of ornament and from the antique (figure and details) much earnestness has been displayed, but the continuity of aim and intention has not always been recognised, and distinct differences in methods and technique in the various divisions have led to wider separation and unrelated study, and a vague conception of the ultimate aim in view. Successful drawing with the point in the aspect of Art study under consideration is only rarely seen in the schools.

Instruction in Modelling has been the most fruitful of the various branches of study; closer intimacy with the works of the great sculptors and architects would lead to still further development.

Improvement in the more advanced forms of Drawing and Painting must be sought through the preceding subjects of instruction, and the desire, in the early stages, to produce for purposes of display, be made subordinate to a truer understanding of the function of study and directed to the inculcation of higher ideals.

Interest in the literature of Art is more widely apparent in the schools, and should be more intensely fostered, and will add largely to the development of that creative and imaginative faculty which is a vital adjunct to receptive teaching in Art.

MISS LOUGH, (*Domestic Economy Inspectress*), reports —

## DOMESTIC ECONOMY.

### COUNTY SCHEMES.

In the large majority of the counties the work is now well organised. Improved accommodation is provided, and the instruction is both practical and useful, economy in every point being instilled into the minds of pupils. Instruction is suited to the type of student attending the various centres. Where Housewifery has been included in the syllabus the results have been beneficial. Hygiene instruction has assumed a more interesting form; practical work, in touch with daily life, forming a portion of each lesson.

### URBAN SCHEMES.

It is satisfactory to report a marked advance in the educational value of the instruction at Technical Schools generally, this being to a great extent owing to the adoption of the Course System. The work is better organised, and the various branches of instruction are carefully graded; pupils, therefore, are well grounded in elementary work before being allowed to perform the more advanced and elaborate exercises. The results are evident in the improved quality of the work accomplished.

### SECONDARY SCHOOLS.

Satisfactory progress in the direction of general utility of work may be reported. Organisation has improved, and equipments have been brought up to date. The necessity for having the work carried out in the best way is now recognised by managers and teachers, the idea that any one can teach Domestic Economy being now obsolete. Note must be taken of the marked improvement in needlework section, both in quality and utility. Patching and darning now form a prominent feature in all centres.

MISS ANDERSON (*Inspectress of Home Industries*) reports:—

## HOME INDUSTRIES CLASSES.

Work for the year included the usual course, viz., Inspection duty, test examinations, visits of enquiry, office work, correspondence, with occasional attendance as judge of Home Industries in some of the more important County Shows.

A few remarks are offered on the principal points.

### LACEMAKING.

Needlepoint Lace maintains its position in the market, and some very fine work has been produced during the year. The outstanding event in the industry has been the Belfast Ladies' presentation of a Court train to Her Majesty—the order being entrusted to the Lace School at Youghal. This important order has afforded employment to forty laceworkers for a period of six months. The work is distinguished by the excellent technique characteristic of the finest lace produced at this centre.

### LIMERICK LACE.

Some very good work has been produced during the past year. It is satisfactory to note that this variety of lace has recovered much of its old reputation, owing to improved technique and greater attention to design. There is still room for improvement, but the progress made is distinctly encouraging. This lace has been in much request during the past season.

## CARRICKMAOROSS LACE.

This kind of lace has also been in keen demand. For some while past there has been a shortage of first-rate work in the market, and there is, therefore, room for the extension and development of the industry.

## SPRIGGING.

During the past session there has been an extension of the number of Sprigging Classes working under County Schemes. Latterly, these Classes have generally been opened in districts where sprigging already exists, and where the industrial workers need systematic training. Properly organised these classes should be of much value to the district. Unfortunately, there is a marked tendency towards filling these classes with school-children, while the senior workers are neglected. These juvenile classes are of little industrial value, and the large numbers in attendance are often incompatible with sound instruction.

Satisfactory work has been produced in the old centres in West Fermanagh, and in the Churchill District, County Donegal. These classes are attended by the local workers.

## DOMESTIC NEEDLEWORK.

Classes for household sewing continue to carry on their valuable educational work, and many young girls have been trained during the past session. Instruction is attractive as well as useful, and the classes have generally been well attended.

## MACHINE KNITTING.

There has been no increase in the number of Knitting classes during the past year. Good work has been produced at centres such as Limerick and Longford; but in the other centres few workers adopt knitting as an industry, but rather as a temporary occupation until some more profitable employment offers; consequently, little progress is made.

## CROCHET POINT.

Some extension of this industry has taken place during the session, but the supply is still much below the demand. Some interesting experiments in design have been attempted in the new centres; these may lead to a further development of the industry.

## CROCHET.

Reviewing the position of the Crochet Industry, it may be said that many of the tendencies of the last few years have been accentuated during the past session.

There has been increased competition from Continental centres, owing to larger importation of foreign crochet. The market for Irish raised or padded crochet has been seriously affected by the large imports of Austrian work; and as Irish *motifs* are freely employed by our Continental rivals, the imported crochet is calculated to deceive the unwary.

The higher grades of Austrian crochet are generally distinguished by good design, and they are dangerous rather for their artistic qualities than for excellence of technique.

The growth of machine-made imitations has also affected the demand for the genuine Irish article.

Hitherto Clones Crochet has held its ground against foreign competition, and machine-made imitations, and there has been a steady demand for well-made work. Many centres show increased sales during the past year, and some very nice work has been produced. To retain the market for Clones Crochet, and to recover portion of the market for Raised Crochet, three things may be regarded as essential:—

(1.) Good work of uniformly fine quality; fine meshwork is of special importance.

(2.) Good shapes and artistic designs. Tasteful variations on traditional patterns are strongly recommended in preference to the constant repetition of common-place patterns—such as the *Trellise*. This pattern is now extensively copied by Continental workers and it readily lends itself to machine reproduction. In short, freshness and variety of design are needed as well as good technique if our Crochet workers are to retain the market against their Continental rivals.

(3.) The importance of sound business methods cannot be over-rated. While the straightforward methods and business-like procedure of many of our industries' classes are gladly acknowledged, it is regrettable to be obliged to admit that good customers have been alienated and good markets lost owing to the slackness and the unreliable business methods of some of our centres.

#### ORGANISATION OF INDUSTRIES' CLASSES.

To secure uniformly good work, the thorough training of the workers is essential. This cannot be secured where intermittent instruction is the rule, and it is false economy which places three or more centres under the charge of one teacher. In such cases, the instruction is either superficial, or the period of training is unduly prolonged owing to the intervals between the class days. In neither case is the result satisfactory. The management also suffers, as the teacher is not sufficiently in touch with the various classes, and cannot effectively control the sale of work. It follows that much of the work is sold independently by the pupils.

#### STATUS OF PUPILS.

It is a common practice in some districts to hold Industries' Classes at night, in order to secure the attendance of Primary School children. Advocates of this system affirm that the early training of the children will ensure their adoption of the industry when they leave school, but experience does not confirm this belief. Comparatively few school children have developed into industrial workers by adopting the industry they were taught in night classes. The restraint and confinement of the class-room, after school hours, seems rather to have given them a distaste for the work. The training of young girls who have finished their school course is a much more hopeful and profitable task.

#### TRAINING OF TEACHERS.

The status of Industrial Teachers is gradually being raised. Good educational work has been organised at the Technical School, Enniskillen, and the Summer Course for Teachers has also produced valuable results.

#### THE TRAINING OF TEACHERS.

The summer courses of instruction to teachers, held in July and August, provided for instruction in  
 SUMMER COURSES, experimental science (physics, chemistry,  
 1911. mechanics, physiology and hygiene, and  
 physical and commercial geography), drawing and modelling, domestic economy, manual instruction (woodwork), practical mathematics and mechanics, handrailing, office routine and business methods, hygiene and sick nursing, housewifery, and rural science (including school gardening). A special course of instruction for teachers of Limerick lace-making, crochet-work, embroidery and sprigging was also held.



The institutions at which the courses were conducted were :—The Royal College of Science, Dublin ; the Metropolitan School of Art, Dublin ; the Irish Training School of Domestic Economy, Stillorgan, Co. Dublin ; the Department's Industrial Annex, Grand Canal Bank, Dublin ; the Municipal Technical Institute, Belfast ; the City of Dublin Technical Schools ; the Christian Brothers' Schools, North Richmond Street, Dublin ; the Municipal Technical School and School Garden, Kingstown ; the Albert Agricultural College, Glasnevin ; and the Crawford Municipal Technical Institute, Cork. Special centres were arranged for members of enclosed religious orders, for whom courses of instruction in experimental science, drawing and modelling, and domestic economy were provided.

The courses were attended by 548 teacher-students, of whom 469 received certificates of satisfactory attendance and progress ; the number attending for instruction in the various subjects being :—Experimental Science, 214 ; drawing and modelling, 99 ; domestic economy, 46 ; manual instruction (woodwork), 20 ; practical mathematics and mechanics, 26 ; handrailing, 10 ; office routine and business methods, 19 ; hygiene and sick nursing, 17 ; housewifery, 8 ; rural science (including school gardening), 49 ; Lace-making, crochet-work, etc., 40.

The staff of instructors numbered 86, the following being the staffs engaged for the various courses :—

*For Experimental Science* :—Professor W. Brown, B.Sc., M.I.E.E. ; Professor Grenville A. J. Cole, F.G.S. ; Professor A. J. Herbertson, M.A. ; Professor H. H. Jeffcott, B.A.L., M.I.MECH.E. ; Professor I. Swain, B.A., A.R.C.S.C.I. ; Messrs. R. G. Allen, B.Sc., A.R.C.S.C.I., A.I.E.E. ; H. O. Beckett, M.A. ; R. W. Bingham, B.A. ; J. A. Clarke, B.A., M.B. ; J. Comerton, B.A. ; F. E. W. Hackett, M.A., B.Sc., Ph.D. ; T. A. W. Hill, B.Sc. ; A. S. M. Iuric, M.A., B.Sc. ; W. J. Lyons, B.A., A.R.C.S.C. (Lond.) ; B. Moore, B.A., LL.B. ; A. O'Farrelly, M.A. ; B. O'Shaughnessy, A.R.C.S.C. (Lond.), F.I.C. ; J. H. Pollok, D.Sc. ; and J. Taylor, M.A., A.R.C.S.C.I., and Messrs. R. W. Duncan, A.R.C.S.C.I. ; G. Ebrill, B.A. ; J. C. Elliott, A.R.C.S.C.I. ; A. Fletcher, B.A., B.A.L. ; D. Hayes, B.A., A.R.C.S.C.I. ; W. R. Johnston, A.R.C.S.C.I. ; J. Ingram, B.E., A.R.C.S.C.I. ; J. G. Ledwidge, A.R.C.S.C.I. ; H. W. Moss, A.R.C.S.C.I. ; M. J. O'Connor ; J. Reilly, B.A., A.R.C.S.C.I. ; F. W. Warwick, B.A., B.E., A.R.C.S.C.I. ; G. A. Watson, A.R.C.S.C.I. ; and Misses B. McIl. Blair, B.Sc., A.R.C.S.C.I. ; G. V. Morrow, A.R.C.S.C.I. ; E. A. Scott, A.R.C.S.C.I. ; M. J. M. Stewart, B.A., A.R.C.S.C.I.

*For Drawing and Modelling* :—Mr. J. Ward, A.R.C.A. (Lond.) ; Messrs. H. C. Charde ; J. W. Freeth, A.R.C.A. (Lond.) ; F. Luke, A.R.C.A. (Lond.) ; G. G. Lynes ; W. M. A. Orpen, A.R.A., R.H.A. ; A. G. Power ; O. Sheppard, R.H.A. ; J. S. Slator ; Mrs. D. Barden ; Misses M. Crilley ; E. Emerson ; A. Jacob ; N. O'Kelly ; K. Quigly.

*For Domestic Economy, Hygiene and Sick Nursing and Housewifery* :—Misses L. A. Baker, M.B., B.S. ; E. Bloxham ; K. Corley ;

O. Gentleman; E. Hewitt, B.A.; T. M. Kelly; B. A. McVeigh; C. F. Millar; M. Murphy; M. Vaughan; J. F. E. Walsh, B.A.; K. E. Warren.

*For Manual Instruction (Woodwork), Handrailing, and Practical Mathematics and Mechanics*:—Messrs. H. O. Armstrong; W. Davidson; J. G. Edwards, A.M.I.M.E.; P. F. Gillies, B.Sc.; W. B. Jamison; and G. H. Smith.

*For Office Routine and Business Methods*:—Messrs. D. J. Coakley; E. Daly; and W. Scott.

*For Rural Science (including School Gardening)*:—Professor Grenville A. J. Cole, F.G.S.; Messrs. D. Houston, F.L.S.; O. H. Little, B.A., A.R.C.S.C.I.; J. Mangan, M.A., F.R.C.S.C.I.; G. O. Sherrard, A.R.C.S.C.I.; Misses E. Alderton; B. McI. Blair, B.Sc., A.R.C.S.C.I.; and M. C. McDowell, A.R.C.S.C.I.

*For Limerick Lace-making, Crochet Work, Embroidery and Sprigging*:—Mr. W. A. Mulligan, A.R.C.A. (Lond.); Mrs. A. Allen; Mrs. K. Breton; Misses M. Maguire; M. O'Neill; S. A. O'Neill; E. Percival; S. A. Reynolds.

The number of teachers who have been admitted to courses in experimental science, drawing and modelling, manual instruction (woodwork), and domestic economy, and the numbers of those whose attendance and progress have been satisfactory, are given in the following tables:—

## EXPERIMENTAL SCIENCE.

### PRELIMINARY COURSE.

YEAR.	First Year Syllabus.		Second Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1901,	196	173	—	—
1902,	166	114	160	110
1903,	164	103	105	87
1904,	129	68	128	105
1905,	141	72	91	57
1906,	131	49	90	53
1907,	41	16	90	84
1908,	91	54	16	16
1909,	22	9	67	52
1910,	118	47	13	11
1911,	10	4	69	60

## SPECIAL COURSE IN PHYSICS.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903.	48	44	—	—
1904.	47	33	35	24
1905.	51	30	55	43
1906.	30	16	48	34
1907.	27	14	35	23
1908.	25	14	33	24
1909.	22	9	21	19
1910.	25	13	11	6
1911.	7	3	16	9

## SPECIAL COURSE IN CHEMISTRY.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903.	69	65	—	—
1904.	43	31	55	40
1905.	48	29	70	55
1906.	47	43	44	40
1907.	35	29	50	37
1908.	41	26	40	28
1909.	20	13	42	34
1910.	37	26	24	9
1911.	12	6	35	25

## SPECIAL COURSE IN MECHANICS.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903.	6	6	—	—
1904.	1	1	5	5
1905.	10	7	1	1
1906.	9	8	4	3
1907.	8	7	8	5
1908.	5	3	6	4
1909.	7	4	1	—
1910.	7	5	6	4
1911.	9	7	6	6

## SPECIAL COURSE IN PHYSIOLOGY AND HYGIENE.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903,	12	10	—	—
1904,	11	11	7	7
1905,	16	15	14	14
1906,	12	12	20	20
1907,	21	20	15	15
1908,	12	11	15	14
1909,	4	4	14	11
1910,	—	—	8	7
1911,	6	5	4	3

## DRAWING AND MODELLING.

YEAR.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1901, .. ..	80	69
1902, .. ..	109	106
1903, .. ..	144	121
1904, .. ..	141	138
1905, .. ..	142	140
1906, .. ..	121	121
1907, .. ..	142	139
1908, .. ..	136	136
1909, .. ..	113	112
1910, .. ..	117	117
1911, .. ..	99	94

## MANUAL INSTRUCTION (WOODWORK).

YEAR.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1902, .. ..	20	13
1903, .. ..	15	9
1904, .. ..	9	8
1905, .. ..	18	12
1906, .. ..	21	13
1907, .. ..	21	19
1908, .. ..	20	16
1909, .. ..	20	15
1910, .. ..	21	18
1911, .. ..	20	13

## DOMESTIC ECONOMY.

YEAR.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903, .. ..	26	15
1904, .. ..	78	64
1905, .. ..	83	64
1906, .. ..	80	65
1907, .. ..	81	74
1908, .. ..	58	45
1909, .. ..	50	48
1910, .. ..	41	33
1911, .. ..	46	41

Provision is made at the Royal College of Science for the training of teachers of Experimental Science, a special group of subjects being arranged for those who wish to take up this branch of the teaching profession. Teacherships-in-training, tenable at the Royal College of Science and at the Metropolitan School of Art are offered for competition amongst science and art students. Particulars of the competitions will be found at pages 342 and 345.

The Department have made provision for a supply of teachers of commercial subjects who will be capable of giving instruction in some of the higher branches. Four Scholarships were awarded in 1904, two in 1905, six in 1906, three in 1907, and eight in 1910. Fifteen scholars have completed a two years' course of training at the London School of Economics and Political Science (University of London), and have been engaged in teaching in the country under the Department's Schemes. Of these, however, three are now otherwise employed. Of the eight who were awarded Scholarships in 1910, two are at present temporarily engaged in teaching under local Technical Instruction Committees in Ireland; they will take up the second year of their Scholarships in the session 1911-12. The other six are continuing their studies at the London School of Economics and Political Science (University of London).

In order to provide for the further training of Manual Instructors, otherwise than by means of Summer Courses, the Department have offered facilities to enable Instructors to attend special Saturday Classes at convenient centres. Classes in Practical Plane and Solid Geometry and in Practical Mathematics were held during the past

session at the Municipal Technical Institute, Belfast, and were attended by nine Instructors.

The training of teachers of Domestic Economy subjects is carried on at the Irish Training School of Domestic Economy, St. Kevin's Park, Kilmacud, Stillorgan, Co. Dublin. The course of training extends over two years, but only those students are selected therefor who have most satisfactorily followed the course in Household Management, which extends over one year.

A report on the School for the session is printed at page 147, from which it will be seen that, during the session, nine students secured the Department's Diploma as Domestic Economy Instructresses.

Classes for the training of National School Teachers in Elementary Experimental Science were conducted in the Technical Schools at Ballymena, Ballymoney, Banbridge, Belfast, Kilkenny, Lame, Londonderry, Nenagh, Portadown, and Sligo.

The following table shows the number of such classes which have been held, and the number of teacher-students in attendance :—

Session.	No. of Centrs.	No. of Teachers presented for examination	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course (Rural Economy)	Total.
1903-4, .	7	53	31	—	—	31
1904-5, .	5	32	22	—	—	22
1905-6, .	7	93	40	15	—	55
1906-7, .	9	110	31	39	—	70
1907-8, .	13	124	17	65	—	82
1908-9, .	11	113	19	42	6	67
1909-10, .	10	88	21	41	7	69
1910-11, .	10	54	11	10	18	39

Special Summer Courses in Rural Science (including School Gardening) were held by the Department during the month of August. Forty-nine National School Teachers were admitted to these courses, of whom forty-seven received certificates of satisfactory attendance and progress.

Classes for the training of National School Teachers in Domestic Economy were held in the following Technical Schools :— Ballsbridge (Co. Dublin), Ballymena, Ballymoney, Banbridge, Belfast, Coleraine, Dundalk, Enniskillen, Kingstown, Larne, Limavady, Limerick, Londonderry, Lurgan, Magherafelt, Newry, Portadown, Sligo, Templemore, Tralee and Waterford.

The following table shows the number of such classes which have been held, and the number of teacher-students in attendance :—

SESSION.	No. of Centres.	No. of Teachers presented for examination	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course.	Total.
1908-9, .	1	12	12	—	—	12
1909-10, .	18	422	362	5	—	367
1910-11, .	21	351	131	109	5	245

Special Drawing Classes for National School Teachers were conducted in the Technical Schools in Dundalk, Limerick, Newry, Portadown, Sligo, Tralee, and Waterford. Ninety-two teachers were presented for examination, of whom fifty-three secured the certificate of satisfactory attendance and progress, all of these being in the first year syllabus.

#### CENTRAL INSTITUTIONS.

The Reports of the Dean and Council and the Registrar of the ROYAL COLLEGE OF SCIENCE AND METROPOLITAN SCHOOL OF ART. Royal College of Science will be found at page 414 of the Appendices, and the Report of the Headmaster of the Metropolitan School of Art at page 426.

The School re-opened on the 9th August with thirty-three students. Of these, nineteen were students whose names remained on the School roll at the close of the previous session, and one was a student who had failed to complete her training at the Kildare Street School. The remaining thirteen were new students admitted to the Household Management Course. Four of these were admitted without examination, having passed in the Senior Grade at the Intermediate Examinations, the other nine being admitted upon the results of the Entrance Examination held on the 14th June, 1910.

At the close of the session, certificates were awarded to the thirteen students who followed the Household Management Course, and six of them were selected for training as teachers.

Of the twenty teachers-in-training who attended the School during the session, one died from an illness contracted during the school vacation, two left without having completed their training, one, having failed to pass her examinations, was not allowed to continue training, nine secured the School Diploma, and seven remained on the School Roll at the close of the session.

The following classes for extern students were held during the session, in order, primarily, to provide facilities for teaching practice by the teachers-in-training:—

Children's Class in	Cookery	attended by	50 students.
" " "	Laundrywork	" "	18 "
" " "	Housewifery	" "	15 "
Adults' Class	Home Sewing	" "	18 "

Forty-two pupils attended the Killarney School of Housewifery during the academic year 1910-11. Of these, one left owing to illness, one went to America, three were dismissed, and twenty-one remained on the School Roll at the close of the session, not having completed their training. Situations with wages ranging from £12 to £18 were obtained for eleven of the pupils who completed their training, the other five electing to return to their homes.

#### SCHOLARSHIPS.

The following Scholarships were awarded during the year:—

- (1.) Scholarships for Boys.
- (2.) Scholarships at Residential Schools of Domestic Training.
- (3.) Local Exhibitions.
- (4.) Science and Technological Scholarships and Teacherships-in-Training at the Royal College of Science (Senior Science Scholarships).
- (5.) Teacherships-in-Training at the Metropolitan School of Art. (Senior Art Scholarships).
- (6.) Industrial Scholarships.
- (7.) Commercial Scholarships.
- (8.) Crochet-work and Sprigging Scholarships.



An examination in connection with the revised scheme of Scholarships for Boys (see Tenth Annual Report, page 90, and Appendices of the present Report, page 327), was held on the 21st June, 1911, and was attended by 249 candidates. As a result of the examination, thirty Technical and eight Apprenticeship Scholarships were awarded.

Of the Scholarships held during the session 1910-11, fifty-three were renewed under the conditions of the old scheme for a second year, and one was renewed for a third year as an Apprenticeship Scholarship.

The following table shows the number of Scholarships awarded by the various Committees :—

COMMITTEE.	New Scheme.		Old Scheme.		Total.
	Technical Scholarships.	Apprenticeship Scholarships.	Second Year Scholarships.	Third Year (Apprenticeship Scholarship).	
Co. Carlow, . . . . .	—	—	17	—	17
Co. Down, . . . . .	3	—	—	—	3
Co. Galway, . . . . .	10	—	17	—	27
Co. Limerick, . . . . .	—	2	2	—	4
Co. Longford, . . . . .	2	—	4	—	6
Co. Mayo, . . . . .	—	3	—	—	3
Queen's County, . . . . .	—	—	10	—	10
Co. Sligo, . . . . .	3	—	—	—	3
Tipperary (Urban and Rural Districts), . . . . .	—	3	2	—	5
Co. Tipperary (North Riding), . . . . .	1	—	1	—	2
Co. Tipperary (South Riding), . . . . .	10	—	—	—	10
Co. Waterford, . . . . .	1	—	—	1	2
TOTALS	30	8	53	1	92

In addition to the Scholarships awarded under the Scheme mentioned above, 305 Scholarships were awarded in 1911 by the Managers of Day Trades Preparatory Schools. These Scholarships, as a rule, cover only tuition, or tuition and the necessary books and instruments, but 68 scholars received, in addition, sums varying from £1 to £12 as maintenance allowance or as grants towards the cost of travelling.

These Scholarships are in some cases renewed from year to year if the progress made by the scholar is satisfactory. In other cases Scholarships, other than First Year Scholar-

ships, are awarded to the pupils generally upon the results of the work of the previous session.

School	First Year Scholars	Second Year Scholars	Third Year Scholars	Fourth Year Scholars	Totals
Ballymena D.T.P.S.	4	5	—	—	9
Belfast Christian Brothers' D.T.P.S.	12	23	15	—	50
Belfast Municipal D.T.P.S.	20	26	8	—	54
Blackrock D.T.P.S.	13	10	—	—	23
Clonmel D.T.P.S.	7	13	—	—	20
Kilkenny D.T.P.S.	7	1	3	1	12
Londonderry D.T.P.S.	8	5	—	—	13
Portadown D.T.P.S.	14	—	3	—	17
Queenstown D.T.P.S.	2	—	—	—	2
Ringsend, Pembroke D.T.P.S.	41	19	6	—	66
Sligo D.T.P.S.	10	6	—	—	16
Waterford D.T.P.S.	15	8	—	—	23
Totals,	153	116	35	1	305

Scholarships at Residential Schools of Domestic Training, of the value of £15 each, are awarded to a limited number of girls to enable them to attend for one year a regular course of instruction and training in Domestic Economy, such as will cultivate their intelligence and resourcefulness and render them more practical in the performance of home duties. The Scholarship, together with the payment of a fee of £2 on the part of the scholar, entitles the holder to board, residence, and instruction during the term of the Scholarship. Further particulars of the conditions under which the Scholarships are awarded and the course of instruction which the scholars undergo are set forth in the County Scholarship Scheme at page 334 of the Appendices.

The number of Scholarships awarded in 1910 by each Committee adopting the scheme was as follows:—

County Carlow, 10; County Dublin, 7; Queen's County, 13; Tipperary Urban and Rural Districts, 2; County Tipperary (South Riding), 3; County Waterford, 3; County Westmeath, 12; County Wexford, 7.

The scholars are distributed between the various approved Residential Schools of Domestic Training as follows:—

Carrick-on-Suir: Convent of Mercy, ..	7
Dublin: Domestic Training Institute, ..	7
Kilmore: Convent of St. John of God, ..	11
Moate: Convent of Mercy, ..	14
Stradbally: Presentation Convent, ..	18

Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art School, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age; they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their studies.

Eight such Exhibitions were granted on the results of the examinations held in 1911, one Art, one Engineering, and one Building Trades Exhibition being awarded to students of the Municipal Technical Institute, Belfast; two Art Exhibitions to students of the Crawford Municipal School of Art, Cork; one Science and one Commercial Exhibition to students of the Municipal Technical Institute, Limerick; and one Science Exhibition to a student of the Central Technical Institute, Waterford. The Science Exhibition awarded to a student of the Limerick Municipal Technical Institute in 1909, and renewed in 1910, was renewed for a third session, and the Science Exhibition awarded to a student of the same institution in 1910 was renewed for a second session.

At the examination for Science and Technological Scholarships and Teacherships-in-Training held in 1911, thirty-nine candidates competed for the five Scholarships and five Teacherships-in-Training offered for competition by the Department, and tenable at the Royal College of Science. The conditions attached to these Scholarships and Teacherships-in-Training are given in Form S.33 (see Appendices, page 345).

An examination was held on the 27th June, 1911, and following days for three Teacherships-in-Training at the Metropolitan School of Art. The examination was attended by thirteen candidates.

LOCAL  
EXHIBITIONS.

SENIOR SCIENCE  
SCHOLARSHIPS.

SENIOR ART  
SCHOLARSHIPS.

The conditions under which the Teacherships-in-Training were offered for competition in 1911 are given in Form S.2 (see Appendices, page 342).

Industrial Scholarships are of the value of £80 each, and are renewable for a second and third year at the discretion of the Department. The object of these Scholarships is to enable selected persons (who must already have been engaged in one of the higher branches of an industry) to take such a course of instruction in that industry, in an institution providing special advanced courses, as will enable them to undertake the management of an industry in Ireland at the termination of their instruction.

No new Scholarships were offered for competition in 1911, but two Scholarships in Woollen Manufacture awarded in 1909, and renewed in 1910, were renewed for a third year, and the two Scholarships, one in Woollen Manufacture and one in Linen Manufacture, awarded in 1909, were renewed for a second year.

The Scholarships in Woollen Manufacture are being held at the University of Leeds; the Scholarship in Linen Manufacture is being held at the Municipal School of Technology, Manchester.

The conditions under which these Scholarships were awarded are given in Form S.190. (See Appendices, page 346).

Commercial Scholarships are of the value of £100 each per annum, and are tenable for two years. The object of the Scholarships is to enable selected persons to obtain such a training as will enable them to undertake the teaching of higher commercial subjects in Ireland.

Eight Scholarships were awarded in 1910; of these, six have been renewed for the session 1911-12, the holders attending the London School of Economics and Political Science (University of London). The holders of two of the Scholarships awarded in 1910 will be temporarily engaged during the session 1911-12 in teaching in Ireland, and will take up their Scholarships again in the session 1912-13. No new Scholarships were awarded in 1911.

The conditions under which the Scholarships were awarded are given in Form S.194. (See Appendices, page 347).

The Department offered for competition in 1911, three Scholarships tenable at the Training School for Lace and Sprigging Teachers, Enniskillen. The object of the Scholarships is to enable selected applicants, who must have had a satisfactory general education, to secure training as teachers of the subjects mentioned.

Two Scholarships in Crochet Work and one in Sprigging were awarded on the results of the examination held under the con-

ditions of award. Further particulars respecting these Scholarships are given at page 347 of the Appendices.

The list of candidates awarded Science and Technological Scholarships and Teacherships-in-Training, Art Teacherships-in-Training and Industrial, Commercial, and Crochet Work and Sprigging Scholarships in 1911, will be found in the Appendices, page 348.

### 3.—FISHERIES.

The Report of the Fisheries Branch for the year 1910 was issued since the date of the Department's last General Report.

The sea fisheries were more productive than in any of the past eleven years. Excluding salmon the value of the fish at place of landing is estimated at £375,630.

#### SEA FISHERIES.

There were no material signs of improvement in the Spring mackerel fishery, although the quantity landed and the amount realised were greater than in the previous year. The Autumn season was well above the average of those for the past twenty years. Most of this fish is cured for the American Market, where, however, prices in 1910 ruled very low. It is pleasing to have to record that a considerable advance in this respect has taken place.

The take of Spring and Summer herring brought to the fishermen nearly £57,000; about one-half of the capture was cured. The Autumn and Winter herring season showed a considerable improvement on that of 1909—in fact it was the most productive of any of the decade. It is estimated that the fish sold for about £128,000. The figures given do not, of course, include the large amount of money that is earned locally by the handling, carting and curing of the fish.

An experiment to test the value of an Irish Crown Brand for cured herrings was undertaken. The branded article sold well to Continental buyers, and it is anticipated will meet with a good demand in the foreign markets as it becomes better known. The Department are much indebted to the Fishery Board for Scotland for assisting in carrying out the experiment.

The number of vessels actually engaged in fishing (some wholly and some partially) irrespective of those following salmon fishing, was 5,652; 20,339 men and 351 boys were employed.

Fifteen fishermen lost their lives while actually in pursuit of their calling during the year ended 30th September, 1910.

#### CASUALTIES.

Arrangements were made during the year ended 31st March, 1911, for making loans to fishermen to the extent of £14,402. A large portion of the amount was allocated to the provision

#### LOANS.

of motor fishing craft, but one Steam Drifter was constructed thereout. The demand for boats driven by engines run with paraffin has increased; and more first-class boats have been

built in the last two years for East Coast Ports than were built in the previous fifteen years.

The class of instruction in net-mending at Kinsale, the cost of which was borne by the Department, was well and regularly attended by the students, all of whom came from the fishing population.

The Department's endeavours to develop the sale of fish in inland towns were continued, and have secured a better and more continuous supply than heretofore. The improvement in business methods on the part of those engaged is marked.

At the Inishkea and Blacksod Whaling Stations, 120 whales were landed. These included 8 Right Whales, 7 Sperm Whales, 11 Blue Whales, 52 Fin Whales, 39 Sei Whales, and 3 Humpbacks. From these were prepared 3,365 barrels of oil, 364 tons of guano manure, about 8 tons of whale bone, about 200 tons of cattle food, and about 100 tons of bone meal. Some 60 local hands were employed at the two stations.

The value of the kelp export from the Counties of Clare, Galway, Mayo, Sligo, Donegal and Antrim during the year is estimated at £17,000.

Prosecutions were successfully instituted in eighteen cases of illegal trawling. Sixteen of these were by steam and two by sailing vessels.

The Department reported three Foreign Steam Trawlers to the Customs Authorities for working in the extra-territorial parts of areas in which steam trawling is prohibited. The effect of the Department's action was to render for a certain time the takes of the three Trawlers liable to confiscation if landed in the United Kingdom.

The Department shared in carrying out the International Investigations for the Exploration of the Sea; and in this connection undertook periodic observations in regard to the Atlantic current off the South-West Coast.

The study of marine fauna and flora of Blacksod Bay is being carried on at regular intervals to test the possible effect of the establishment of the Whaling Station in the locality.

Several publications (referred to in the Report of the Fisheries Branch) bearing on the scientific and economic aspect of questions connected with the fisheries were issued during the year.

The entrance to Arklow Harbour has been kept open, and the Dock recently constructed by the Department has proved very useful. The Graving Slip there has also been in constant use.

At Courtown Harbour various improvements in the sluicing arrangements have been made.

At Ballaghaline the construction of a pier and slip is being carried out.

The widening and extension of the pier at Buncrana have been completed, and a large amount of dredging has been carried out with the object of affording facilities to the fishing fleet which operates from this centre in the late Spring and Winter.

Works have been carried out at Port Ballintoy with the object of improving the harbour accommodation.

The Department's schemes for the improvement of the landing accommodation at Ballycastle, Co. Antrim, and Rathlin Island are before the Antrim County Council.

The Department carried out, and contributed largely to the cost of, extensive dredging operations at Balbriggan, and effected other improvements in that harbour.

The Department submitted to the Royal Commission on Inland Navigation certain schemes connected with the River Blackwater, Co. Waterford, the Suir, the estuary of the Boyne and the Ballinamore Canal. The schemes were adopted and recommended by the Commission in question.

It is considered that the yield was less than in the year 1909 but was more than that of any other of SALMON FISHERIES. the past seven years.

Drift netting for salmon on the North and West Coasts was very successful.

No sign of disease was observed in any of the districts.

Local Boards of Conservators and Protection Associations were financially assisted, on certain conditions, by the Department to the following extent:—

Dublin Board of Conservators	..	£11	16	0
Waterford	..	90	0	0
Cork	..	250	0	0
Bandon	..	30	0	0
Skibbereen	..	25	0	0
Bantry	..	9	0	0
Kenmare	..	60	0	0
Waterville	..	50	0	0
Killarney	..	200	0	0
Limerick	..	536	10	0
Galway	..	50	0	0
Ballinakill	..	10	0	0
Bangor	..	15	0	0
*Ballina	..	250	0	0
Sligo	..	20	0	0
Ballyshannon	..	23	0	0
Lough Derg Fishery Society	..	50	0	0
Westmeath Lakes Fish Preservation Society	..	18	6	1
Lough Sheelin Trout Protection Association	..	30	0	0
Lough Mask and Carra Fishery Society	..	15	0	0
Lough Corrib Association	..	25	0	0
Lough Arrow Fish Preservation Society	..	10	0	0

\* Amount not issued until 1911.

#### 4.—STATISTICS AND INTELLIGENCE.

The work of this Branch, which has greatly developed in recent years, falls under four main heads :—

- (1.) The collection and publication of agricultural, trade, and other economic statistics relating to Ireland ;
- (2.) The collection of information both at home and abroad on questions submitted to the Department and affecting its work ;
- (3.) The editing of the *Quarterly Journal* of the Department and press-editing of other publications issued by the Department ;
- (4.) The distribution and despatch of reports, leaflets, and other publications.

##### STATISTICAL SECTION.

This section has three main divisions—the Agricultural Statistics of Ireland, the Statistics of Irish Imports and Exports, and the Statistics of Prices of Irish Agricultural Products.

The Agricultural Statistics of Ireland include the statistics of the division of land, of the number and size of agricultural holdings and of their distribution, of the area and produce of crops and the numbers and classes of live stock, of the extent and kinds of woods and plantations and of planting and felling operations, and also of the supply and migration of agricultural labour and the wages of the same. Special statistics are also collected as to the area under the different classes of fruit; the extent of the several varieties of potatoes; the different breeds of live stock; the mortality of live stock; bee-keeping; the number and production of creameries, butter factories, corn mills, scutch mills, malt houses; and the numbers and use of the chief classes of farm machinery.

The statistics of the division of land and the number and classes of live stock, together with many of the special statistics, are collected annually in June. The preliminary results of the enumeration showing the changes in the area of crops and the numbers of live stock are published in August or September.

Reports providing preliminary information regarding the state and the prospects of the several crops are published at intervals during the summer and autumn. The next step is the collection of information as to the yield of these crops. Returns of the yield of hay are collected at the end of August, those of grain crops and potatoes at the end of October or early in November, and those of the root crops and flax at the beginning of December. As soon as the information thus collected has been examined and compiled, it is issued



in a series of bulletins—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Roots, and (5) Flax. This method of division enables information as to the several crops to be made known at as early a date as possible. Care has, however, to be taken not to collect this final statistical information regarding each crop until almost the whole has been saved, as otherwise an erroneous estimate might be formed.

Finally, in the volume of Detailed Agricultural Statistics which is issued later, full and revised tables are furnished showing, as compared with previous years, the area and produce of crops and the numbers of live stock. In this volume are also contained particulars as to the acreage of agricultural holdings; statistics of forestry; and various other statistics relating to varieties of fruit, live stock, scutch mills, etc.

A separate report is issued annually on the subject of Irish Agricultural Labour. This report in recent years has been considerably extended, and deals not only with the annual migration of agricultural labourers to England and Scotland, but also with the supply of agricultural labour in Ireland, and with the wages earned by Irish agricultural labourers respectively in Great Britain and Ireland.

The first report published by the Department on Irish Import and Export Statistics was for the year 1904, and reports have been published for each year since, that for 1910 being the last issued. The returns are in many respects still unsatisfactory. As has been pointed out in the Reports the returns relating to manufactured imports and exports are at present open to serious error, which, under existing conditions, cannot be safeguarded against, and, until adequate statutory powers are provided, it will be impossible to secure returns which are fully complete, reliable, and up-to-date.

Annual reports are issued dealing with the prices of Irish live stock and agricultural produce. Arrangements have been made for a considerable extension of the number of reports received of prices of live stock at markets and fairs, and the development of the system of reporting prices of agricultural produce sold in the principal market towns is at present receiving attention.

Two half-yearly reports are also issued by the Department on the Banking, Railway, and Shipping Statistics of Ireland.

Statistical leaflets are issued to the "Press," public and private companies and private individuals, showing:—

- (1.) Exports of animals. These are issued weekly, monthly, and yearly.
- (2.) Prices of live stock at the principal Irish markets and fairs. These are issued daily.
- (3.) The number of pigs killed or bought dead by Irish bacon curers. These are issued weekly.

Enquiries are constantly being received for statistical information from Government departments, public institutions, and private individuals in these and foreign countries and in the Colonies. This involves the compilation of a large number of special statistical tables each year.

The following statistical reports have been issued since the last Annual Report :—

- (1.) Detailed Agricultural Statistics of Ireland for the year 1910. Cd. 5964-1911.
- (2.) General Abstracts of the Acreage under Crops and Numbers and Descriptions of Live Stock in 1911. Cd. 5886-1911.
- (3.) Abstracts of the Average Yield and Total Produce of the following Crops in 1911 :—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Root Crops, (5) Flax.
- (4.) Report and Tables Relating to Irish Agricultural Labourers in 1910-11. Cd. 6019-1911.
- (5.) Report on Imports and Exports at Irish Ports in 1910. Cd. 5965-1911.
- (6.) Return of Prices of Crops, Live Stock, and other Irish Agricultural Produce, 1910. Cd. 5882-1910.
- (7.) Two half-yearly Reports on Banking, Railway, and Shipping Statistics in Ireland. Cd. 5684-1911 ; and Cd. 5934-1911.

#### INTELLIGENCE SECTION.

During the year systematic information as to the condition and progress of the crops was obtained from time to time from correspondents in the several counties, and four crop reports and two fruit crop reports, based on the information thus supplied were issued during the course of the summer and autumn. During July and August special weekly reports also were received from each Constabulary district giving particulars of the nature and progress of the potato blight, and stating the extent to which spraying operations were being carried out.

The systematic collection of information by means of egg record has been continued during the past year, and SPECIAL INQUIRIES. regular monthly returns have been received from about 200 correspondents. These records have proved of great interest and importance as showing in a concrete way the use of statistical method in farm work. A further development of the work has now taken place. Hitherto the records have been of flocks or pens, but a series of records, dealing with individual hens by means of the trap-nesting system, has been established. The keeping of records, whether in milk or egg production, is a matter of the greatest importance, as it is only by means of the record that reliable

comparisons can be made, and that flocks and herds can be properly weeded of the least profitable stock. At the same time only by such continuous records and observation can the transmission of producing power be ascertained in a reliable manner. It is important, therefore, that this part of the work should be further developed, and that also in other branches of farm management more systematic information should be obtained as to actual costs of production on typical farms in Ireland. There is a great field for the useful development of statistical records and exact method of accounts as applied to farm work.

Among other inquiries special reference may be made to that on the organisation of the dead meat trade and to veal calf production in Ireland. Several reports on these subjects were published in the Department's JOURNAL, and further inquiries are being carried on.

In connection with the development of special inquiries the work of compiling a List of the principal Irish Exporting Manufacturers, for circulation in the Colonies and in foreign countries has been completed. The list has been published and issued to British Consuls abroad, Trade Commissioners in the Self-Governing Dominions, Trade Commissioners in British India, Correspondents of the Commercial Intelligence Branch of the Board of Trade in Colonies and Protectorates, Commercial Attachés in Embassies abroad, the First Secretary to each Foreign Legation in London, Trade Inquiry Offices of the Self-Governing Dominions at London, Commercial Departments of Foreign Powers, Italian Chamber of Commerce, the principal Ocean Steamship Companies and to many leading commercial firms abroad. It has also been circulated at home to Irish Members of Parliament, the Irish Newspaper Press, Industrial Associations, Irish Chambers of Commerce, Subscribers, Firms suggested by Subscribers, Foreign Consuls in Ireland, etc., etc. The list is still being issued at home and abroad and every effort is being made to bring it under the notice of all likely to help in any way Irish industries and Irish industrial and commercial expansion. Inquiries are frequently received from foreign countries for the names of firms of Irish producers, and it is hoped that this publication will greatly assist in making known the names of Irish firms and the merits of Irish goods.

The publication of the Quarterly JOURNAL has been continued as heretofore, and its appeal has been widened

“JOURNAL,” by the addition of a section dealing with  
LEAFLETS, ETC. the work of the National Museum of Science and Art. Several contributions of special practical importance have been re-issued in the form of leaflets or bulletins, including :—

Caerphilly Cheese-making in Ireland,

Investigations on Potato Diseases : Second Report ;

Irish Crown Brand for Pickled Herrings,  
 Irish Table Duck Industry,  
 Milk Production: Can it be increased?  
 Pig Feeding Experiments at Clonakilty, Co. Cork,  
 Potato Crop: Decline of the "Champion,"  
 Seaweed as Manure,  
 Technical Instruction in Bangor,  
                   "                  "                  Clonmel,  
                   "                  "                  Newtownards,  
 Tests with Nitrogenous Manures,  
 Tuberculosis in Poultry,  
 Weeds.

The following Departmental Publications have been issued and are on sale to the public:—

Report of Departmental Committee on the Irish  
 Butter Industry, and Minutes of Evidence, &c.;  
 Report of Departmental Committee on Irish Flax-  
 Growing Industry, and Minutes of Evidence.;  
 Cookery Notes, for use in Schools and Classes for  
 Girls working under the Department's Schemes;  
 Forestry Notes. An illustrated pamphlet. Being  
 Practical Hints on the Formation, Management,  
 and Protection of Woodlands in Ireland. By A.  
 C. FORBES, F.H.A.S., M.R.I.A., Forestry In-  
 spector.  
 The Management of a Cottage Garden;  
 Farmer's Account Book.

Seven leaflets were re-issued in a revised form, viz.:—Results of Field Experiments in Barley, Meadow Hay, Potatoes, Mangolds, Oats, Turnips, Flax and Wheat.

The special issue of leaflet No. 14 (Prevention of Potato Blight) to National Schools, etc., in Ireland, was repeated.

The total number of separate leaflets issued during the year amounted to, approximately, 987,000.

There has been a steady increase in correspondence with foreign countries and in the information furnished to the Department as regards agricultural development abroad. The great increase in agricultural research work as well as in the methods of organisation for the protection and development of agriculture in the different countries is a matter which requires the closest observation. No country can afford to ignore the steps which other countries are taking, or to neglect to compare results. The Department

FOREIGN  
 CORRESPONDENCE  
 AND EXCHANGE,  
 LIBRARY, ETC.

are now in regular communication with the International Institute of Agriculture, Rome, Agricultural and Statistical Departments of the Colonies and the chief Foreign Countries, and receive an exchange of publications which may be consulted in the Departmental Library. In addition, a large number of foreign agricultural publications of a non-official character are received and their contents indexed for the use of inquirers.

In connection with the inquiries, statistical and other, carried on by this Branch, the Department have to acknowledge the great assistance received from the Inspector-General of the Royal Irish Constabulary, the Chief Commissioner of the Dublin Metropolitan Police, the Registrar-General for Ireland, the Managers of the Irish Banks, the Irish Railway Companies, the Irish Port and Harbour Authorities, and also from a large number of correspondents who have furnished information on agricultural and other questions.

## 5.—VETERINARY.

The Veterinary Branch deals with the work of the Department functions as the Central Authority in Ireland under the Diseases of Animals Acts. A separate report in relation to the proceedings under those Acts is issued for each calendar year. Consequently, it will be sufficient here to refer briefly to some matters arising out of the work during the twelve months ended 30th June, 1911.

In 1910 an Order was issued requiring owners to notify cases of this disease, in certain of its forms, among their cattle. By means of such notification it is hoped that when the time comes for dealing further with the malady, particulars will have been accumulated affording some indication as to the extent of its diffusion and the areas wherein it is most prevalent. The cases coming under notice during the twelve months ended 30th June, 1911, numbered in all 256, distributed through 28 Counties.

### BOVINE

#### TUBERCULOSIS.

Irish cattle continue to enjoy comparative immunity from Anthrax, of which disease only 7 outbreaks, involving the death of 11 animals, were reported throughout the country during the year ended 30th June last.

### ANTHRAX.

In the same period the outbreaks of Swine Fever in Ireland numbered 112. This total is substantially beneath the annual average for several years past, but it does not contrast so favourably with the aggregate for the preceding twelve months, during which the number of outbreaks sank to the exceptionally low figure of 85.

### SWINE FEVER.

The position as regards Sheep Scab in Ireland during the year ended 30th June, 1911, showed appreciable improvement as compared with the previous year. In the former period 399 outbreaks were recorded as against 463 in the latter.

During the year close attention was paid to the enforcement of dipping as a protection against the disease. Two dippings annually of all sheep throughout Ireland are now required, and in 1910, the latest year for which figures on the subject are yet available, 2,614,499 sheep were returned as having received the prescribed summer dipping, and 1,858,287 the autumn dipping.

This disease, though not widely spread, was a little more prevalent during the twelve months ended 30th June, 1911, than in the preceding year. The outbreaks for the two periods were 62 and 71 respectively.

Two outbreaks of this disease came under notice during the twelve months ended 30th June, 1911, as compared with one in the preceding year. In the period ended 30th June, 1911, the number of animals found affected was three only. Extensive enquiries made after the disposal of these cases failed to disclose any further centre of infection.

## 6.—TRANSIT AND MARKETS.

Under this head are grouped matters relating to—

The transit of animals ;

The transit of produce ;

Railway rates ;

The enforcement of the Sale of Food and Drugs Acts as regards butter, margarine, cheese, margarine-cheese and milk ;

The Merchandise Marks Acts.

The action taken by the Department's Staff in Great Britain ; and

The Markets and Fairs (Weighing of Cattle) Acts, 1887, and 1891.

### TRANSIT OF ANIMALS.

The Transit Inspection Staff of the Department exercised careful supervision over the railway transit of animals in Ireland and the shipment of animals to Great Britain.

During the period, four new vessels were provided for the

conveyance of live stock between Ireland and Great Britain. Some of the older cattle-carrying vessels have been withdrawn from the trade.

Detailed information as to the work under this head will be found in the Annual Reports of the Department under the Diseases of Animals Acts. These Reports are published separately.

#### TRANSIT OF PRODUCE.

The Inspection Staff visited railway stations and ports in regard to the condition and handling of consignments of produce and the arrangements made by the carrying companies for the conveyance of the consignments. Whenever the reports of the Inspectors showed that there was any carelessness on the part of the servants of the companies in handling or loading the consignments, the attention of the companies concerned was drawn to the matter. Defects observed in the preparation of consignments of agricultural produce for the markets formed the subject of communications with the consignors.

The numbers of Inspections at Railway Stations and Ports are as follows :—

No. of Inspections at	Railway Stations in Ireland,	..	925
"	"	Railway Stations in Great Britain,	21
"	"	Ports in Ireland,	.. 174
"	"	Ports in Great Britain,	.. 9

Merchants in several centres in Great Britain were interviewed by the Inspectors as to the condition in which Irish produce reached the markets. There was general agreement among the merchants that a marked improvement had taken place in the condition of the packages—better boxes and cases being used and the occurrence of breakage being less frequent. Complaint was, however, rather frequently made as to the damp condition of the packing material in cases of eggs.

Inquiries were made, in a large number of cases, regarding delay or damage in transit to consignments of various articles of produce.

Very serious dislocation of traffic occurred owing to the strike that took place in September on some of the principal lines of railway.

#### *Butter.*

Improvement in the condition of the packages of butter continues. The boxes are more neatly finished and are better able to withstand the strain of transit.

PACKAGES.

On some occasions the Inspectors noticed that boxes of butter, while being conveyed to railway stations, were not adequately protected from the heat of the sun, and that packages were conveyed in vehicles not in a cleanly condition. There is, however, no reason to believe that such carelessness is of frequent occurrence.

It now rarely happens that instances of rough handling of boxes of butter at the premises of carrying companies come under notice. There were only a few cases of the conveyance of butter in waggons not sufficiently clean or in which articles likely to taint the produce were being carried. The use of trays for the loading of consignments of butter on steamers and for the unloading of the consignments is extending. The more general adoption of this method of loading and unloading should prove of advantage.

It is disappointing to find that there is no extension in the demand for refrigerator vans for the carriage of butter. Owing to the comparatively small extent to which the vans made available by one company were used, the company have altered some of the vehicles so as to make them more fitted for the conveyance of other merchandise.

The number of steamers conveying produce from Ireland to Great Britain and fitted with refrigerating apparatus is the same—eleven—as that given in the report for the previous year.

### *Eggs.*

Improvement in the cases for the conveyance of eggs is becoming more marked. Comparatively few instances of the use of unsuitable timber in the cases or of badly-secured lids came under notice.

Much room for improvement still, however, exists. On many occasions the Inspectors have seen, in transit, cases which had spaces between the boards sufficiently wide to admit of eggs being removed, or in which the packing had been carelessly done—there being in some instances no packing material whatever between the eggs and the timber of the cases. These are the defects which come most frequently under notice.

The packing material in the cases is sometimes found to be wet.

This condition must often be ascribed to packing in the open or without adequate protection from rain, or to the absence of suitable protection for the cases when packed and awaiting conveyance. The injury to the Irish egg industry through cases of eggs being placed on the markets in a damp condition must be considerable.



The Department had the question of covered or improved accommodation at certain egg markets brought under the notice of the local authorities. In one case, shedding accommodation was made specially available for the egg traffic. At another market, at which some difficulty arose as to the conditions on which a shed would be used by egg merchants, the question was satisfactorily settled. In another case, the Department's action resulted in arrangements being made by egg buyers whereby increased covered accommodation was made available and used for the purpose of the packing of eggs.

The carrying companies have issued strict instructions to their servants as to the manner of handling consignments of eggs, and instances of carelessness have been severely dealt with.

Several complaints of breakages to consignments of eggs were investigated. Generally, difficulty arises in ascertaining the cause of breakage or locating the place where the breakage occurred, as indication of the breakage does not usually become apparent for some time after the damage has taken place—often the breakage is not discovered until the cases are examined at their destination.

### *Live Fowl.*

Inquiries as to the dimensions of crates that could be regarded as most suitable for the conveyance of poultry were continued during the period by officers of the Department. Much attention was also given to the question of the conditions under which the traffic could be most satisfactorily conducted. While some shippers have adopted improved descriptions of crates, there were many instances of the use of crates which were not divided into compartments, or in which sufficient head space was not left for the birds. Overcrowding of birds in crates not infrequently takes place, and complaint has been made that Irish live fowl have been found to be in a bruised condition when placed on the markets in Great Britain.

Power has now been conferred on the Board of Agriculture and Fisheries in Great Britain and on the Department by the Poultry Act, 1911, to make orders "for protecting live poultry from unnecessary suffering while being conveyed by land or water and in connexion with their exposure for sale and their disposal after sale," and "for requiring the cleansing or disinfection of receptacles or vehicles used for the conveyance of live poultry."

Orders are in course of preparation.

### *Fruit.*

During the fruit season, the Inspectors visited the principal stations from which fruit is forwarded. Considerable improve-

ment was effected in the accommodation at one station for the purposes of the fruit traffic. Special facilities were also afforded for the conveyance of strawberries from certain stations in the South of Ireland. On one line the number of special fruit vans had been increased, and were, during the season, in daily use for the carriage of fruit.

### *Fish.*

Much attention was given to the transit of fish. The arrangements for dealing with the traffic at the principal stations of despatch were looked into and the handling of the consignments at the points of transhipment was from time to time observed.

### *Railway Rates.*

During the year ended the 30th June, 1911, fifty-three complaints as to charges for the conveyance of

COMPLAINTS. merchandise were received. The complaints related to butter, dead poultry, eggs, fish, fruit, live stock, milk, potatoes, etc.

Eleven of the complaints had reference to the non-existence of through rates. Through rates were fixed in three cases. In one case, through rates had already been in operation.

Twenty-one of the complaints were to the effect that existing through rates were excessive. Reduced rates were fixed in nine cases. In one case, a lower rate than that of which complaint had been made was actually in force.

Eighteen of the complaints related to local rates. In four cases reduced rates were fixed. Refunds were made in three cases.

One complaint referred to local rates and to the non-existence of through rates. The local rates were reduced and through rates were fixed.

In one case it was desired that rates inclusive of charges for cartage should be put into operation for the carriage of furniture and bedding from Dublin to certain stations. The companies concerned were not prepared to put such rates into operation.

The remaining case related to the charges for the conveyance of potatoes, grain, etc., between Belfast on the one hand and Castlewellan and other places in the County Down on the other—a rates war having arisen between the Great Northern Railway Company and the Belfast and County Down Railway Company as regards traffic to and from Castlewellan. The Department had inquiries made as to the question in dispute, and also communicated with the Board of Trade, who were unable to effect a settlement. The case was carefully considered by the Department, but it did not appear to be one for them to bring before the Railway and Canal Commissioners.

The dispute still continues.

A Summary of the Complaints will be found in the Appendices, page 431.

*Delays and Damage in Transit.*

During the period, 1st July, 1910, to 30th June, 1911, sixty-nine complaints were received as to delays or damage to consignments in transit. A summary of the complaints and of the results of the inquiries will be found in the Appendices, page 439.

*The Enforcement of the Sale of Food and Drugs Acts as regards Butter, Margarine, Cheese, Margarine-Cheese and Milk.*

The administration of these Acts is primarily imposed on the local Authorities, i.e., the Councils of the

ADMINISTRATION OF THE ACTS. thirty-three administrative counties and the Councils of the following boroughs:—Dublin, Belfast, Clonmel, Cork, Drogheda, Kilkenny, Limerick, Londonderry, Sligo, Waterford and Wexford.

In thirty-one of the administrative counties the Inspectors under the Acts, are members of the Royal Irish Constabulary and in the remaining two counties the duty is performed by members of the Royal Irish Constabulary and by local officers.

In five boroughs—Dublin, Belfast, Clonmel, Drogheda and Kilkenny—the duties of Inspectors are performed by officers not connected with the police forces; in three boroughs—Cork, Sligo, and Wexford—the Inspectors are members of the Royal Irish Constabulary, and in the remaining boroughs—Limerick, Londonderry and Waterford—members of the Royal Irish Constabulary and also local officers act as Inspectors.

Compared with the numbers for the year 1909, there was a reduction in the numbers of samples of butter, margarine, cheese and milk taken by Inspectors in the counties in the year 1910 for analysis. In 1910 the total number of samples of these articles was 9,173 and in the previous year, 10,185. The numbers of prosecutions for the respective periods were 308 and 354. As will be observed, no marked variation has taken place in the proportion of prosecutions to the total numbers of samples taken.

In the boroughs the numbers of samples of margarine, cheese and milk vary only very slightly during the periods, the respective numbers being:

1910—margarine, 82; cheese, 27; milk, 3,135.

1909—margarine, 88; cheese, 30; milk, 3,170.

The numbers of samples of butter taken were 786 in 1910, and 882 in 1909. The total number of prosecutions in 1910 showed a substantial increase as compared with the total for the previous year, the respective numbers being 238 and 176. The increase in prosecutions took place principally in regard to samples of milk. Activity on the part of the Inspectors with a view to prevent the fraudulent sale of adulterated milk or milk from which fat has been removed appears to be increasing. In the

year 1909, when the number of samples taken was 3,170, the number of prosecutions was 130, in the year 1910, when the number of samples was 3,135, the number of prosecutions was 205; while in the half-year ended the 30th June last, 1,855 samples were taken and 171 prosecutions instituted. The amount of the penalties imposed in respect of the prosecutions regarding samples of milk taken in the half year amounted to £300 10s. 3d., the amounts of the penalties for the years 1909 and 1910 being respectively £223 4s. 0d. and £277 7s. 6d.

The following table gives particulars of the numbers of samples of butter, margarine and milk taken by officers of the local authorities in each of the years 1906, 1907, 1908, 1909 and 1910, the numbers of prosecutions and convictions, and the amounts of the penalties imposed:—

YEAR.	BUTTER.				MARGARINE.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.				£ s. d.
1906	4,655	189	160	151 15 7	170	13	10	16 15 1
1907	4,539	190	157	131 4 6	164	8	8	7 15 0
1908	4,538	168	137	121 18 0	173	16	14	24 6 0
1909	5,184	150	140	190 18 2	156	8	7	14 2 0
1910	4,655	124	116	111 14 10	137	9	8	8 18 1

YEAR.	MILK.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.
1906	8,350	495	408	474 10 5
1907	8,179	371	324	422 15 6
1908	8,563	425	363	592 3 4
1909	8,402	371	331	475 8 3
1910	7,856	413	355	457 4 4

Tables giving details as to the samples of butter, margarine, cheese, margarine-cheese and milk taken by Inspectors in the counties and the boroughs during the year 1910 and the half year ended the 30th June, 1911, will be found at pages 452-457 of the Appendices.

Sections 2 and 24 of the Sale of Food and Drugs Act, 1899, empower the Department in relation to any matter appearing to them to affect the general interests of agriculture to direct their officers to procure for analysis samples of any article of food. In accordance with directions given in the exercise of this power three officers obtained during the year 1910, 976 samples for analysis—970 samples as butter, 5 as margarine, and 1 as margarine-cheese. The samples were taken in 32 counties and in 4 boroughs.

Of the samples obtained as butter—22 of which were sold as salt firkin butter—34 (5 being salt firkin butter) were found to contain over 16 per cent of water, 1 was found to consist almost entirely of foreign fats and 1 was certified as containing 26·12 per cent. of fats foreign to butter.

Prosecutions were undertaken by the local authorities in respect of 15 samples containing an excessive proportion of water. A conviction followed in each case and penalties amounting to £11 12s. 0d. were imposed. In 13 cases the excessive proportion of water was considered too small to warrant proceedings, in 3 cases notices as to the percentage of water in the butter were displayed, in 1 case the statutory time limit had, through an oversight, lapsed, and in the remaining 2 cases the local authority concerned did not proceed as the samples were of salt firkin butter and did not contain more than 20 per cent. of water. When the Department learned of the unwillingness of the local authority to prosecute it was then too late for them to empower one of their officers to institute proceedings (Section 3, Sale of Food and Drugs Act, 1899). There is, of course, no power on the part of a local authority to depart from the 16 per cent. standard in respect of any class of butter. The Sale of Butter (Ireland) Regulations, 1902, under which the presence of more than 16 per cent. of water in a sample of butter raises a presumption that the sample is not genuine, apply to all butter other than imported butter and butter which has been subjected to treatment in a butter factory, and it is the duty of each local authority to enforce the laws which aim at securing that food exposed for sale is in a pure and genuine condition.

Proceedings were instituted by the local authority in respect of the sample which was found to consist almost entirely of fats foreign to butter. A conviction followed and a fine of £5 was imposed. As regards the sample found to contain 26·12 per cent. of fats foreign to butter, action for the institution of proceedings was not taken within the statutory time limit.

Infringements of the labelling clauses of the Sale of Food and

Drugs Acts appeared to have taken place in respect of four of the samples of margarine. Prosecutions were undertaken by the local authorities in 3 cases. A conviction resulted in each case, and fines amounting to £3 14s. 0d. were imposed. In the remaining case it was not found practicable to institute proceedings within the time limit.

As regards the sample of margarine-cheese, an officer of the Department was informed that comparatively large quantities of margarine-cheese were purchased by dealers who sold it on stands at markets and fairs in the North-East of Ireland. It was deemed desirable that definite information should be obtained as to the labelling of the margarine-cheese when sold by such dealers, and an Inspector of the Department was instructed to visit certain markets and fairs for the purpose of sampling. At one market a sample was purchased which was delivered in a wrapper on which the words "Margarine-Cheese" did not appear. Proceedings were instituted by the local authority; a conviction followed and a fine was imposed.

Three hundred and seventy-two samples were obtained during the half year ended the 30th June, 1911, in 24 counties and 2 boroughs. Three hundred and seventy of the samples were sold as butter and the remaining two as margarine.

Ten of the samples of butter were found to contain water in excess of 16 per cent.

Proceedings were instituted by the local authorities in respect of 6 of these samples. Convictions followed in 5 cases, and fines amounting to £2 4s. 1d. were imposed. One case was dismissed on the ground that the water had not been fraudulently added to the butter. The Department were advised that application should be made to the magistrates to state a case. A question, however, arose as to liability for law costs, and as the sanction of the local authority for proceeding with the case could not be obtained within the period within which the application should be made, further action was not taken in the matter.

In two cases the proportion of water was only very slightly in excess of 16 per cent. In one case the analyst did not consider the percentage of water too high considering the weather, and in the remaining case it was not found practicable to have proceedings instituted within the time limit. In this case the Department suggested that the local authority should caution the vendor.

Fifteen of the samples taken were salt firkin butter, but in none of them was the percentage of water found to exceed sixteen.

In one case, the margarine from which the sample was taken was not labelled in the prescribed manner and the sample was

delivered in a wrapper on which the word "Margarine" did not appear. Proceedings were instituted by the local authority; a conviction resulted, and penalties amounting to £1 3s. 11d. were imposed.

Tables giving particulars as to the samples taken during the year 1910 and the half-year ended the 30th June, 1911, are printed at pages 458-459 of the Appendices.

The number of premises registered as manufactories of margarine and of margarine-cheese stood on the 30th June, 1911, at 5 and 1 respectively. The number of premises registered for wholesale dealings in margarine or margarine-cheese was 180.

As compared with the figures for the 30th June, 1910, there was no change in the numbers of registered manufactories, but there was an increase of one in the number of premises registered for wholesale dealings in margarine. Notifications were received that during the year registrations of premises for wholesale dealings in margarine or margarine-cheese had been effected in 3 cases (two in Belfast and one in Waterford), that one manufactory of margarine had been registered in Cork, that two registrations of premises in Belfast for wholesale dealings had been cancelled, and that the registration of a manufactory of margarine in Cork had been cancelled.

A Table showing as on the 30th June, 1911, the distribution of the registered manufactories and wholesale dealers' premises will be found at page 460 of the Appendices.

The registers which manufacturers of margarine and margarine-cheese and wholesale dealers in these articles are required to keep showing the quantity and destination of each consignment sent out from their manufactories or

places of business are periodically inspected by officers of the Department. The information derived from these inspections is of much assistance to the Department in their work of supplementing the action of the local authorities in securing that the requirements as to the marking of parcels of margarine are duly observed by traders. In only one case was the register not available for inspection at the time of the visit of an officer of the Department. On the whole the registers appeared to have been properly kept.

The Department having learned that consignments were being sent as butter from Dublin to an institution in the country considered it desirable to obtain a sample. Accordingly a sample was obtained at the institution and was submitted for analysis. It was found to be margarine. Subsequently it was arranged to hand to an officer of the Department, with a view to

analysis, the weekly supply—15 lbs. of salted butter and 4 lbs. fresh butter—which was expected to arrive on a certain day. The package which consisted of a wooden box wrapped in brown paper with a label bearing the address of the consignee was received in February, 1911, at the railway station at Warrenpoint by the consignee and there delivered by him to the Department's officer. The box was found to contain two parcels each wrapped in plain white paper. Portions were taken for analysis and it was found that the sample taken from the larger package was "composed almost entirely of fats foreign to butter," the sample from the smaller parcel being pure butter. There was no mark to show that the large lump was composed of margarine. Proceedings were then instituted in the name of the consignee against the consignor for an offence under Section 6 of the Sale of Food and Drugs Act, 1875—selling to the purchaser an article of food which was not of the nature, substance and quality demanded by the purchaser. The case came before the Dublin Police Court in March when for the defence an objection was raised to the jurisdiction of the magistrate on the ground that the consignment having been sent "carriage paid," Warrenpoint was the place of delivery referred to in Section 20 of the Sale of Food and Drugs Act, 1875, and that, accordingly, the proceedings should have been instituted there. In Section 20 it is provided that: "When the analyst having analysed any article shall have given his certificate of the result, from which it may appear that an offence against some one of the provisions of this Act has been committed, the person causing the analysis to be made may take proceedings for the recovery of the penalty herein imposed for such offence, before any justices in petty sessions assembled having jurisdiction in the place where the article or drug sold was actually delivered to the purchaser, in a summary manner." The case was adjourned and was further argued on the 31st March, when an adjournment again took place. At the hearing, evidence was given on behalf of the defence to show that the arrangement was that the butter was to be delivered, carriage paid, at Warrenpoint. Judgment was delivered on the 21st April, the magistrate declining jurisdiction in the case. The magistrate held that under the contract, Warrenpoint was the place of delivery, and furthermore stated that in his view there could not be a successful prosecution anywhere as the magistrates at Warrenpoint had no jurisdiction to have a summons served in Dublin, and having regard to the precise language of Section 20 of the Act of 1875, the Dublin Police Magistrates were precluded from dealing with a case of adulteration where the debased article had been actually delivered to the purchaser outside the Metropolitan Police District. If this view is correct, and there does not appear to be ground for holding the contrary, it would be desirable that provision should be made whereby proceedings under the Sale of Food and Drugs Acts could be instituted as well before a Court having jurisdiction in the place



of sale, as before a Court having jurisdiction in the place of delivery.

The number of butter factories (i.e., premises on which by way of trade butter is blended, re-worked or subjected to any other treatment but not so as to cease to be butter) registered with local authorities stood on the 30th June, 1911, at 173. The factories were situated in nineteen counties and in six boroughs. On the 30th June, 1910, the number registered was 145. Notifications were received that during the year the registration of 36 factories had been effected and that in 7 cases registrations had been cancelled. The following is the distribution of the factories registered within the period :—two in Antrim, one in Carlow, four in Cavan, eleven in County Cork, eight in Kerry, one in Leitrim, two in County Limerick, one in County Londonderry, one in Longford, one in Monaghan, one in County Waterford, one in County Wexford, and two in the Borough of Cork. The premises of which the registration was cancelled were situated as follows : three in Kerry, one in Leitrim, one in the County Londonderry, one in Belfast and one in the Borough of Cork. In one case premises had been incorrectly returned as being registered as a butter factory.

A statement showing the number of registered butter factories in each administrative area will be found at page 460 of the Appendices.

Officers of the Department visited a number of premises which were reported to be used as butter factories. The owners were informed as to the requirements regarding the registration of the premises with the local authorities concerned and in some cases the question of registration was brought by the Department under the notice of the local authorities. Registration followed in certain cases. In other cases the re-working of butter was discontinued.

Officers of the Department made, during the year, a large number of inspections in premises registered as butter factories. In one case it was found that there was communication otherwise than by a public street or road between premises registered for wholesale dealings in margarine and premises registered as a butter factory. The Department brought the matter under the notice of the local authority concerned and the use of the premises as a butter factory was discontinued. The registration was cancelled.

In no case during the year was there found in a butter factory any oil or fat which might be used as an adulterant of butter. On the occasion of inspections, inquiry was made as to the markings on boxes and wrappers in which the butter was forwarded

from the factories. Suitable action was taken as to any descriptions regarded as misleading.

Officers of the Department took a large number of samples in butter factories during the year ended 30th June, 1911. Many of the samples were taken as a test and of these, 30 were found to contain water in excess of 16 per cent. In these cases the attention of the proprietors of the factories was drawn to the proportion of water found in the samples, and it was pointed out to them that the maximum proportion of water in butter should not exceed 16 per cent., and an explanation was sought. In several cases it was stated that the butter sampled had not been blended or re-worked in the factories in which the samples were taken.

In the case of one sample which was found to contain an excessive proportion of water, the proprietor stated that he had to use hot water in blending butter in cold, frosty weather. The case appearing to be one for instruction, the Department arranged for the visit of an Instructor to the factory who gave information as to the working of butter without the use of hot water.

Proceedings were in one case instituted in respect of a sample taken in a butter factory and found to contain 17.1 per cent. of water. The question of the procedure in bringing forward a case of the kind formed the subject of correspondence with the local authority. The case having been twice adjourned was withdrawn.

Eighteen samples taken at butter factories in a northern district were found, on analysis, to contain a low quantity of volatile acids—the Reichart-Wollny figure falling below 24. Some of the samples were taken in November, 1910. Others were taken in the following March.

PURITY OF BUTTER.  
—  
REICHART-WOLLNY  
FIGURE.

It was suggested that the proportion of volatile acids in the samples taken in November might in some cases be connected with the lactation period of the cows or particular conditions of weather, feeding or housing. In the case of the samples taken in March, the result appeared to throw suspicion on the purity of the butter having regard to the period of the year. The Department had inquiry made as to the origin of the butter. The district was a poor, hilly one; the cows were rather of an inferior description, and, owing to the scarcity of grass in the early parts of the year were timed, as far as practicable, to calve in June or July. The samples having been taken in Winter and Spring were in all probability produced from the milk of cows which had been milking for several months. The matter is receiving attention.

Whenever the Department have reason to believe that on any premises butter is by way of trade either made or stored, and that for the purposes of the Sale of Food and Drugs Acts or the Butter and Margarine Act inspection is desirable, the Department may specially authorise an officer to enter the premises, and in such case the officer has the like powers of entry, inspection and sampling as if the premises were registered under the Sale of Food and Drugs Acts or the Butter and Margarine Act. (Butter and Margarine Act, 1907, Sections 2 (3) (b) and 14 (1)).

In nine cases this power of entry by special authority was exercised during the period under review. In four of these cases the Department desired to ascertain whether the premises were being used as butter factories. In one case registration followed the inspection. In another case the premises had been registered as a butter factory, but notification of the registration had not been received by the Department. In the third case no butter was found on the premises, and it was stated that no blending or re-working was carried on. In the fourth case, butter was not being blended or re-worked at the time of the visit and no machinery for such purpose was found on the premises. It is understood, however, that butter is purchased from farmers and is salted and made into rolls in the premises. The question of having the premises registered is receiving attention.

In each of the remaining five cases the premises to which entry was authorised were occupied by traders. No irregularity as to labelling was discovered in respect of samples taken in two of the cases. Eight samples were taken in the one case and four samples in the other.

In a third case, seven samples were taken, four of which were certified by the Analyst as consisting nearly altogether of fats foreign to butter. In none of these cases was the substance from which the sample was taken marked "margarine," and in one case the sample was delivered in a wrapper on which the word "margarine" did not appear. The piece from which the sample was taken was, at the time the Inspector entered the premises, labelled "Creamery Butter." Proceedings for offences against the labelling clauses of the Margarine Act, 1887, were instituted by the local authority. A conviction followed and a fine of £10 was imposed.

In a fourth case, six samples were obtained. Two of the samples were taken from cardboard boxes which were enclosed in brown paper, but neither the boxes nor the outer wrapper

bore any marks to show that the substance enclosed was margarine. The paper in which the article was enclosed in the boxes was marked "margarine." Proceedings were instituted for not having the parcels marked "margarine" in the manner indicated in Section 6 of the Margarine Act, 1887, i.e., branded or durably marked "margarine" on the top, bottom and sides. For the defence it was contended that such marking was not necessary as the boxes were prepared for transmission by post to customers. The magistrate held that the packages were marked in the manner required by the Section.

In the fifth case, of seven samples taken, six proved to be pure butter. The remaining sample—margarine—was taken from a roll which was enclosed in a carton box and which was wrapped in three butter papers, the inner paper being marked "margarine." Proceedings were instituted for not having the box marked "margarine." In view of the decision in the previous case, this case was withdrawn.

During the year ended the 30th June, 1911, applications for the approval of 97 names for use in connection with margarine were received by the Department. Approval of 93 of these names was issued. In one case approval was issued to two applicants. Sixteen of the names had previously been approved.

A list of the approved names will be found at page 461 of the Appendices.

Lists of approved names are issued by the Department to local authorities for the information of officers engaged in the administration of the Sale of Food and Drugs Acts.

The Commissioners of Customs and Excise inform the Department that their officers took at Irish Ports during the year ended the 30th June, 1911, 22 samples under Section 1 of the Sale of Food and Drugs Act, 1899, and Section 5 of the Butter and Margarine Act, 1907, viz. :—6 samples of margarine at Dublin, 10 samples of margarine, 1 sample of butter and 1 sample of condensed milk at Belfast, and 4 samples of margarine at Cork. One of the samples of margarine taken at Dublin was found to contain 16·9 per cent of water. The importer was prosecuted and fined £1 with £2 costs.

The Department were informed that samples of butter which had been consigned to Birmingham by a trader in Ireland had been found to be adulterated with boric preservative to a serious extent. Further samples of the butter consigned by the trader were, it was stated, obtained, and on analysis were found to contain boric preservative equivalent to 1·2 and 1·8 per cent. of boric acid. An officer of the Department called on the

consignor and drew his attention to the recommendation made in 1901 by the Departmental Committee on Preservatives in Food as to 0.5 per cent. expressed as boric acid being the maximum proportion of boric preservative that should be allowed to be used in butter. The consignor intimated that he would, as far as practicable, cease to use boric preservative in butter, and that in any case in which it was considered desirable to use such preservative the proportion would not exceed the percentage indicated in the recommendation.

The Department were also informed that a sample of margarine which, it was stated, had been supplied by an Irish firm was found to contain 18.6 per cent. of water and .65 per cent. of boric acid. The Department had a sample of margarine taken at the premises. The sample was found, on analysis, not to contain either water or preservative in excess.

It seemed to the Department that advantage would result if a notice were widely circulated drawing the attention of butter makers to the regulations regarding water in butter. A poster was accordingly issued, a copy of which is printed in the Appendices, page 461.

POSTER.

—  
WATER IN BUTTER.

A list of the Analysts under the Sale of Food and Drugs Acts for the Boroughs and Counties in Ireland will be found at page 462 of the Appendices.

ANALYSTS.

### *The Merchandise Marks Acts.*

(Ireland).

A considerable number of cases as to the application of misleading descriptions to various articles received attention.

Blended butter had been described as creamery butter; butter which had been reworked had been described as creamery butter or dairy butter; butter made from set cream had been forwarded in boxes on which the words, creamery butter, had been branded; and foreign or colonial butter had been enclosed in boxes or wrappers marked in such a manner as might lead to the conclusion that the butter was made in Ireland. The Department communicated with the persons concerned, with the result that in several cases the descriptions were altered, and in others the use of boxes bearing the markings to which objection was taken was discontinued.

Four prosecutions in regard to butter were undertaken at the instance of the Department. Three of the cases related to the application of the description creamery butter to butter which was pronounced by experts to be factory butter. In the remaining case margarine was supplied as butter.

In one of the three cases, two packages of butter were purchased at a creamery by an officer of the Department—the words, creamery butter, BUTTER  
PROSECUTIONS. appearing on the wrappers and carton boxes in which the butter was enclosed.

The butter was examined by experts who expressed the opinion that it was factory butter. Instructions were then given for a prosecution. When the case came up for hearing, the defence brought forward evidence that the butter in each package was made in the creamery and had not been reworked. The Bench was evenly divided and the case was adjourned. The case was subsequently reheard when a majority of the magistrates decided to convict, and the proprietor and the manager were each fined £1 with costs. On the application of the defence the fines were increased to £1 1s., so as to permit of an appeal. An appeal was lodged and the case was heard at the Quarter Sessions, when the decision of the magistrates was reversed, the Court holding that in view of the evidence for the defence the butter was actually creamery butter.

In the second case, two packages of butter which were purchased on different dates by an officer of the Department at the premises of a trader in Dublin, and which were described as Irish creamery butter in the receipts given to the officer were pronounced by experts to be factory butter. The carton boxes in which the butter was enclosed were marked so as to indicate that the butter was that of a well-known firm in Ireland, but the butter was not described on the boxes as creamery butter. Proceedings were instituted against the trader for the sale of butter to which a false trade description had been applied. A conviction resulted, and a fine of £2 with £3 costs was imposed.

In the third case, the proceedings were in respect of a sample of butter purchased at premises in Listowel. The butter was enclosed in a wrapper marked "Fresh Creamery Butter," and was described as creamery butter on the receipt given by the vendor. Two experts who examined the butter expressed the opinion that it was factory butter. The defendant pleaded guilty. A fine of 2s. 6d. with costs was imposed.

As regards the proceedings in respect of the sale of margarine as butter, it was reported to the Department that a trader in Dublin had supplied as butter to a customer an article which was believed to be margarine. The supply on three occasions was sampled, submitted for analysis, and found to be composed almost entirely of fats foreign to butter. The article was described in the receipts as butter. A plea of guilty was entered. A fine of £12 was imposed.

The question of the descriptions under which eggs were exposed for sale received constant attention. In-  
EGGS. quires were made as to the markings on boxes of imported eggs. No case for proceedings arose in Ireland during the period. Through the

instrumentality of the Department's Inspector, proceedings were instituted in Great Britain. Particulars of the cases will be found on pages 181-2.

A case in which Danish pigs' heads were supplied to an Irish trader—Irish pigs' heads having been ordered—was brought under the notice of the Department. The question of proceedings under the Merchandise Marks Acts was considered but the evidence was not regarded as sufficient for a prosecution under the Acts.

Inquiry was made as to sales of foreign meat in Ireland, but no evidence that the meat was sold as Irish was obtained. The question of the description applied to hams exported from Ireland, but not of Irish origin, was looked into. No evidence of irregularity was forthcoming.

Representation was made to the Department that large quantities of imitation cider were being sold as cider, with consequent injury to the genuine cider industry. Test samples were submitted by the Department for analysis and were found to be artificial preparations containing no cider. Purchase was then made in Dublin of a quantity of a beverage described as the "Celebrated Cyder" of a certain firm—the words "Not Guaranteed Pure Apple Cyder" being added. In the receipt given by the vendor the beverage was described as the firm's "Cyder." On analysis it was found that the article was not genuine cider. Proceedings were instituted under the Merchandise Marks Act for the application of a false trade description "Cyder" to the beverage, and for the sale of the beverage so described. The case was twice adjourned, on the second occasion pending the decision in a case in Dublin undertaken by the Local Authority under the Sale of Food and Drugs Acts in respect of the sale of a sample of the beverage as cider. In this case, the magistrate held that the beverage was not cider—the analyst stating that there was no evidence that the beverage contained apple juice—and that the label on the bottle to the effect that the contents were not guaranteed pure apple cider was not sufficient to bring the vendor within the protection afforded by Section 8 of the Sale of Food and Drugs Act, 1875. When the case brought by the Department came subsequently before the Court, the defendant pleaded guilty and an undertaking that a name other than Cyder would be used for the beverage was given on behalf of the manufacturers. A fine of 20s. was imposed.

Proceedings under the Sale of Food and Drugs Acts in respect of the sale of imitation cider were successfully instituted in other cases by Local Inspectors under the Acts.

The attention of the Department was also drawn to the use of the name, "Champagne Cider," for aerated waters. Corres-

pondence took place in the matter between the Department and mineral water manufacturers, and in a number of cases the Department were informed that the use of the name would be discontinued. In other cases correspondence is still proceeding.

Action was taken to ascertain whether articles sold as linen were really of that description.

#### LINEN.

In one case, collars purchased at the premises of a firm in Dublin and described as linen on the receipt given by the vendor were found on examination to be made from cotton. Proceedings were instituted, a conviction resulted, and a fine of £5 with £5 costs was imposed.

A case was brought under the notice of the Department in which the markings applied to certain handkerchiefs were regarded as indicating that they were of Irish manufacture. It was ascertained that the material in the handkerchiefs was not made in Ireland, and, at the suggestion of the Department, the markings were altered.

Under the Merchandise Marks (Ireland) Act, 1909, the Department are empowered to make, with the concurrence of the Lord Chancellor of Ireland and of the Board of Trade, regulations providing that in certain cases the prosecution in Ireland of offences under the Merchandise Marks Act, 1887, be undertaken by the Department. Accordingly, the Department made Regulations dated the 14th April, 1910, and a Supplementary Regulation dated the 31st October, 1911. Copies of the Regulations will be found at pages 463-4 in the Appendices.

#### *Action taken by the Department's Staff in Great Britain.*

The Department's staff in Great Britain for the prevention of frauds affecting Irish produce consists of an Inspector and four assistants. During the period the premises of traders who had previously either been warned or prosecuted in connection with misleading descriptions of goods sold by them were visited and it was gratifying to observe that much greater care was being taken in the marking of goods by those concerned. In many cases, the action taken by the Inspector resulted in greater prominence being given to displays of genuine Irish goods.

Numerous purchases of articles described as Irish or in such a manner as to suggest that the goods were of Irish origin were made. Several cases were brought into Court. In other cases, a warning to the vendors was considered sufficient.

There is no doubt that considerable injury is being suffered by the Irish butter industry owing to fraudulent sales of margarine, especially in the poorer districts. In many cases the Inspector's assistants co-operated with the officers of local authori-

#### BUTTER.



ties in making purchases at the premises of suspected traders. Samples were taken in this manner in Glasgow, and proceedings were instituted by the Glasgow Corporation against nine traders. In seven cases the proceedings were for the sale of margarine as Irish butter, and in the remaining two cases for breaches of the labelling clauses of the Sale of Food and Drugs Acts. Convictions were obtained in all cases, and penalties ranging from 15s. or three days' imprisonment to £15 or thirty days' imprisonment, were imposed. The statement made by the defendant at the hearing of one of these cases that it was quite the usual thing to supply margarine when Irish butter was asked for, would seem to indicate that a systematic fraud is carried on in the selling of margarine as Irish butter.

As a result of the sampling in the Borough of St. Pancras by the Inspector's assistants, summonses were issued by the Local Authority against fourteen traders for the offence of selling margarine as Irish butter. A fine of £2 with costs was imposed in each case.

Complaints were made to the Inspector that factory butter was being sold as Irish creamery butter. Investigations were made, but no case arose which was suitable for taking into Court.

Several cases of dispute as to the quality of Irish butter or the percentage of moisture in the butter were brought under the notice of the Inspector. The butter was examined, and the result conveyed to the parties concerned. In most cases a satisfactory settlement followed.

Complaints as to damage to consignments of butter forwarded from Ireland, or delay in the conveyance of the consignments, were also investigated.

There is no doubt that the practice prevails to a considerable extent of packing foreign eggs into the Irish type of case not marked in any way to show the country of origin. Premises in which

#### EGGS.

it was suspected that such repacking took place were under observation, and in some instances, warnings were given as to the penalties liable to be incurred by selling foreign eggs as Irish. Proceedings under the Merchandise Marks Act were instituted by the Crown Agent, Edinburgh, at the instance of the Inspector, against a trader in Coatbridge for selling as Irish, eggs alleged to be Russian. The case was, however, withdrawn owing to the death of the defendant.

The Board of Agriculture and Fisheries prosecuted at the instance of the Inspector, a trader in Liverpool for the sale of Russian eggs as Irish. A conviction resulted, and a fine of £5 with £10 10s. costs was imposed. It appears that, the fine not having been paid, a warrant for the arrest of the defendant has been issued.

A trader in Preston was prosecuted by the Board of Agriculture and Fisheries, under the Merchandise Marks Act, at the instance of the Inspector, for the sale of foreign eggs as Irish.

A fine of £5 with £11 11s. 6d. costs, was imposed. In cases of this kind, difficulties arise regarding expert opinion as to the country of origin of the eggs. The difficulty was shown in a similar case in Preston in which the Board of Agriculture and Fisheries also proceeded under the Merchandise Marks Act, at the instance of the Inspector. The experts to whom the eggs were submitted by the Inspector expressed the opinion that they were Russian. For the defence, evidence was given that it was not possible from external examination of eggs to determine the country of their origin, and the experts were asked to indicate the country of origin of eggs submitted in Court. The defence stated that the opinions expressed were incorrect, but no evidence was called to this effect. The case was dismissed.

Much attention was given to the question of the marks applied to bacon, and in several instances in which the markings of bacon of foreign origin were likely to lead to the belief that the bacon was Irish, the traders concerned, on being cautioned, expressed their readiness to discontinue the descriptions which were regarded as misleading. One result of the action taken was a large display of Irish bacon at several establishments.

#### BACON.

Proceedings under the Merchandise Marks Acts were instituted in two cases. In one of the cases, one of the Inspector's assistants purchased, at Glasgow, a ham which was described as "Finest Belfast Smoked," but which was found to bear the Danish Government Mark. The case was brought under the notice of the Lord Advocate, and proceedings were instituted on his behalf by the Procurator Fiscal. The defendant was convicted, and a fine of £1 1s. was imposed. In the other case, an officer saw in a shop in Glasgow pieces of bacon which were ticketed "O'Mara's Hams and Bacon, Limerick." On examination of the bacon it was found that the Danish Mark appeared on the part which was not exposed to the view of the purchaser. The shop assistant admitted that the bacon was Danish. The proceedings were also instituted by the Procurator Fiscal. The defendant was fined £10, or, in default of payment, he was to be imprisoned for three months.

Instances of advertising, as Irish linen, goods which did not appear to be of that description came under the notice of the Inspector. Representations were made to the advertisers concerned in cases in which such action was regarded as sufficient.

#### LINEN.

Proceedings were instituted by the Board of Trade, under the Merchandise Marks Act, against a firm trading in Manchester as the, "Belfast Linen Society," for the application of a false trade description to handkerchiefs sold to the Inspector's assistant. The handkerchiefs were described as "Finest Quality Irish Linen Cambrie," but were found on examination to be composed of cotton. The Company were fined £20 and costs, 25 guineas

extra costs being allowed. An assistant who sold the handkerchiefs was fined £1 with costs. The premises are no longer known as those of the Belfast Linen Society.

In another case, proceedings were instituted by the Board of Trade against a firm trading as "The Irish Linen Combine," Newcastle-on-Tyne. Collars and handkerchiefs purchased at the premises as Irish linen by the Inspector's assistant proved to be composed of cotton. The Combine represented in their invoices that they were manufacturers of shirts, collars, handkerchiefs, hosiery, etc., and had marked on the collars a trade mark containing a representation of Ireland, and the words "Irish Linen Combine, Manufacturers. None genuine without this Trade Mark." Seven summonses were issued against the firm. The case in respect of six collars sold on the 17th August, 1910, was first proceeded with. A fine of £20 with £15 costs was imposed. The hearing of the other charges against the firm was adjourned *sine die*, and subsequently withdrawn. The title of the firm was altered soon after the close of the case.

A trader in Cardiff was also prosecuted for applying the description, "Linen" to collars, which, on expert examination, proved to be made from cotton. The proceedings were instituted by the Board of Trade, at the instance of the Inspector. A plea of guilty was entered. A small fine was imposed.

Numerous cases came under notice of "union" faced collars being described verbally as "linen," "all linen," and "real linen." There appears to be very little doubt that sales of cotton or "union" collars, as linen, take place to no small extent.

Complaint had been made to the Inspector that damasks were sold as "Hand Loom" damasks at prices considerably below the correct market price of genuine Irish Handloom damasks. Samples of the goods described as "Hand Loom" in the catalogue issued by the firm in question were purchased, and were found, on expert examination, to have been made on power looms. In some instances there were indications that the damask was Irish made. The attention of the firm was drawn to the matter, and it was pointed out to them that the damasks were not marked in accordance with the Irish Handloom Weavers Act, 1909.

The firm stated that the goods were purchased as handloom by them, but without any written guarantee. The damask was, it appeared, of foreign manufacture.

#### *Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891.*

Upwards of 230 inspections and enquiries were made during the year ended the 30th June, 1911, by  
 INSPECTIONS. officers of the Department in regard to the provision of accommodation at fairs at which tolls are taken in respect of cattle and at auction marts. Representations as to the need for the provision of adequate

weighing facilities were made to the market authorities or the auctioneers concerned in cases in which it was considered that such facilities should be made available.

New machines for weighing cattle were provided at the Callan, Edgeworthstown and Knocknagree fairs, and various improvements were effected in the weighing accommodation at the fairs held at Balla, Ballinasloe, Dunmanway, Enniskillen, Kilfinane, Kilkenny and Swinford. Machines were also made available for weighing cattle brought for sale at the Drumshambo fair and at an auction mart at Navan.

In several cases the Department are in communication with market authorities as to the provision of new or improved weighing accommodation.

The Department issued during the period, in respect of thirty-nine fairs and seventeen auction marts, Orders exempting Market Authorities and Auctioneers from the obligation to provide accommodation for weighing cattle. A list of the fairs and auction marts will be found at page 465 in the Appendices.

I have the honour to be,

Your Excellency's faithful servant,

T. W. RUSSELL,

*Vice-President.*

T. P. GILL,

*Secretary.*

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET,  
DUBLIN, 24th February, 1912.

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ACCOUNTS.

## PARLIAMENTARY GRANT.

[Moneys voted by Parliament to defray the Administrative Expenses of the Department, and Expenses connected with the maintenance of the National Museum, National Library of Ireland, Metropolitan School of Art, Royal Botanic Gardens, Royal College of Science, and Geological Survey of Ireland; and to provide for the payment of Grants to Schools and Classes of Science and Art and Technical Instruction, and Grants in Aid under the Diseases of Animals Act, under Sec. 15 (d & f) of the Agriculture and Technical Instruction (Ireland) Act, 1899, and to the Congested Districts Board for Ireland under 62 & 63 Vic., cap. 18, s. 3, and 9 Edw. 7, cap. 42, s. 49.]

## ACCOUNT OF PARLIAMENTARY GRANT in the Year ended 31st March, 1911.

RECEIPTS.				PAYMENTS.			
	£	s.	d.		£	s.	d.
Parliamentary Grant	416,366	0	0	Salaries and Wages, . . . . .	53,313	2	10
Appropriations in Aid	7,409	12	0	Travelling, . . . . .	10,938	5	0
				Special Services and Incidental expenses, . . . . .	3,134	2	3
				Collection of Agricultural and Trade Statistics, . . . . .	3,592	12	6
				Grants in Aid, under Sec. 15 (d) and (f) of the Agriculture and Technical Instruction (Ireland) Act, 1899, and sec. 49 of the Irish Land Act, 1909, . . . . .	37,000	0	0
				Diseases of Animals—Grants in Aid, . . . . .	10,200	0	0
				INSTITUTIONS OF SCIENCE AND ART.			
				Salaries and Wages, . . . . .	31,641	0	10
				Purchase of Specimens for Museum—(Grant in Aid), . . . . .	2,300	0	0
				Purchase of Books for National Library—(Grant in Aid), . . . . .	1,300	0	0
				Furniture, materials, &c., and fitting up of objects, . . . . .	2,043	2	7
				Royal College of Science—Purchase of Specimens, Books, Apparatus for Laboratories, &c. (Grant in Aid), . . . . .	10,600	0	0
				Royal College of Science—Prizes, Scholarships and Examinations, . . . . .	3,426	10	1
				School of Art—Accessories and Models, Materials, &c., . . . . .	328	11	2
				School of Art—Prizes, &c., . . . . .	595	10	2
				Botanic Gardens—Purchase of Seeds, plants, books, timber and garden sundries, . . . . .	790	1	0
				Travelling, . . . . .	759	7	2
				Incidental Expenses, . . . . .	585	7	10
				SCHOOLS OF SCIENCE AND ART, &c.			
				Annual Grants to Schools and Classes of Science and Art and Technical Instruction, . . . . .	22,143	11	11
				Grants for Drawing and Manual Instruction in Miscellaneous Schools, . . . . .	1,618	10	6
				Grants for Day Secondary Schools, . . . . .	27,533	12	1
				GEOLOGICAL SURVEY OF IRELAND.			
				Salaries, . . . . .	1,937	17	4
				Travelling, . . . . .	322	6	0
				Incidental Expenses, . . . . .	45	9	10
				Congested Districts Board—Grant in Aid, 62 & 63 Vic., cap. 18, s. 5, and 9 Edw. 7, cap. 42, s. 49, . . . . .	169,750	0	0
				Tobacco Growing Experiments (Grant in Aid), . . . . .	6,000	0	0
				Forestry Operations, . . . . .	3,839	1	1
				Horse Breeding, . . . . .	4,600	0	0
					415,288	2	7
				Balance on 31st March, 1911, . . . . .	8,487	0	5
Total, . . . . .	423,775	12	0	Total, . . . . .	423,775	12	0

## SUSPENSE ACCOUNTS.

	Balance on 1st April, 1910	Receipts in 1910-1911.	Payments in 1910-1911.	Balance on 31st March, 1911.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Purchase of Specimens for Museum (Grant in Aid Fund)	568 14 9	2,300 0 0	2,195 1 5	673 13 4
Purchase of Books for National Library (Grant in Aid Fund)	199 12 0	1,300 0 0	1,439 16 1	59 15 11
Royal College of Science—Purchase of Specimens, Books, Apparatus for Laboratories, &c. (Grant in Aid Fund)	1,325 18 10	10,600 0 0	1,362 14 2	10,563 4 8
Tobacco Growing Experiments (Grant in Aid Fund)	3,673 7 10	6,000 0 0	3,463 7 10	6,210 0 0
His Majesty's Stationery Office,	1 19 6	15 19 1	15 10 10	2 7 9
Local Science and Art Scholarships and Exhibitions,	55 0 0	167 14 0	192 14 0	30 0 0
Examination fees—South Kensington,	—	164 3 6	164 3 6	—
Students' deposits—Royal College of Science,	51 13 9	13 0 0	11 0 0	53 13 9
Improvement of Horse Breeding—Development Fund Account,	—	5,386 1 1	4,600 0 0	786 1 1
General,	—	72 16 6	72 16 6	—
Total,	5,876 6 8	26,019 14 2	13,517 4 4	18,378 16 6

GENERAL CATTLE DISEASES FUND (IRELAND), INCLUDING  
Account of RECEIPTS and PAYMENTS in respect of the GENERAL  
PNEUMONIA ACCOUNT (IRELAND), for the

RECEIPTS.			
		£ s. d.	£ s. d.
Balance on 1st April, 1910			
General Cattle Diseases Fund (Ireland), . .	10,818 11 3		
Cattle Pleuro-Pneumonia Account for Ireland, . . . . .	—		
			10,818 11 3
GENERAL CATTLE DISEASES FUND (IRELAND) (57 and 58 Vict., cap. 57, sec. 71 (1))—			
Assessments on Local Authorities, . . . . .	14,378 6 7		
Proportion of Fines, . . . . .	353 10 6		
			15,231 17 1
CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND OF THE GENERAL CATTLE DISEASES FUND—			
Parliamentary Grant-in-Aid of the Account, under the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57), for general expenses, including special expenditure for the protection of imported Cattle, . . . . .	100 0 0		
Parliamentary Grant-in-Aid of the Account, for the costs of the execution of the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57), as respects Swine Fever, . . . . .	10,000 0 0		
Parliamentary Grant-in-Aid of the Account, in respect of expenses in connection with the suppression of Rabies, . . . . .	100 0 0		
			10,300 0 0
Salvage, . . . . .			3,307 19 7
Transferred from the General Cattle Diseases Fund (57 and 58 Vict., c. 57, section 73 (3)), . . . . .			5,483 7 9
Total . . . . .			44,941 15 8

## THE CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND.

CATTLE DISEASES FUND (IRELAND), including the CATTLE PLEURO-  
Year ended 31st March, 1911.

PAYMENTS.						
	£	s.	d.	£	s.	d.
GENERAL CATTLE DISEASES FUND (IRELAND)—						
Recompments to Local Authorities (57 and 58 Vict., c. 57, secs. 71 and 72)	3,892	19	1			
Fees, . . . . .	30	17	0			
Travelling Expenses, . . . . .	2	9	3			
Miscellaneous Expenses, . . . . .	321	14	4			
Transferred to Cattle Pleuro-Pneumonia Account for Ireland (57 and 58 Vict., c. 57, sec. 73 (3)), . .	5,483	7	9			
				14,641	7	5
CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND OF THE GENERAL CATTLE DISEASES FUND—						
General Expenses—						
Salaries (including the pay of the Staff em- ployed in cleansing, disinfection, branding, &c.), . . . . .	6,712	18	10			
Fees, . . . . .	245	17	6			
Travelling Expenses, . . . . .	1,029	9	9			
Compensation to owners of slaughtered Swine, . .	9,044	6	8			
Miscellaneous (including the cost of requisites for cleansing and disinfection, and casual labour in killing, burying, branding and removal of animals, and other petty expenses), . . . . .	837	8	5			
				18,890	1	2
Rabies Expenses—						
Salaries and Fees, . . . . .	—					
Travelling, . . . . .	1	6	2			
Miscellaneous Expenses, . . . . .	—					
				1	6	2
Balance 31st March, 1911—						
General Cattle Diseases Fund (Ireland), . . .	11,499	0	11			
Cattle Pleuro-Pneumonia Account for Ireland, .	—			11,499	0	11
Total, . . . . .				44,941	15	8

[Fund administered by the Department, in concurrence with the as regards certain special sums mentioned in Section 16 of the Act Industries, and Technical Instruction; Agriculture and Technical

Account of NET RECEIPTS and PAYMENTS by the Department in re-

Section of Act, 62 & 63 Vict., c. 50	RECEIPTS.			
		£ s. d.		
	Balance on 1st April, 1910, . . . . .	49,828	6	9
	Parliamentary Grants—			
15 (d.)	Sum payable as an equivalent for the Salaries attached to Judgeships abolished, &c., in pursuance of the Supreme Court of Judicature (Ireland) (No. 2) Act, 1897, 60 and 61 Vict., c. 66, . . . . .	12,000	0	0
15 (j.)	Sum representing the amount of expenses formerly paid out of Parliamentary Grants in connexion with instruction given in Ireland in Agriculture, exclusive of such instruction given in Elementary National Schools, . . . . .	6,000	0	0
—	Grant in Aid under Sec. 49 of the Irish Land Act, 1909, 9 Edw. 7, c. 42, . . . . .	19,000	0	0
	Local Taxation (Ireland) Account—			
15 (a.)	Sum formerly payable to the Commissioners of National Education under the Local Taxation (Opportunities and Excise) Act, 1890, 53 and 54 Vict., c. 60, sec. 3, . . . . .	75,000	0	0
—	Sum payable under the Agriculture and Technical Instruction (Ireland) (No. 2) Act, 1902, 2 Edw. VII., c. 38, . . . . .	5,000	0	0
15 (b.)	Irish Church Temporalities Fund—Annual sum payable, . . . . .	70,000	0	0
15 (c.)	Sea and Coast Fisheries Fund—54 and 55 Vict., c. 48, s. 35 (5), Loans Repayments, &c., . . . . .	5,243	9	1
—	Interest on Securities and on Moneys deposited, . . . . .	8,571	13	9
—	Contribution from Ireland Development Grant (Grant in Aid), 3 Edw. VII., c. 23, for the purposes of Technical Instruction, . . . . .	7,000	0	0
—	Loans for Bulls, Stallions, Pasteurising Plant, Fencing, Spraying, Village Halls, Hand Separators, &c., and to Agricultural Credit Societies (Repayments), . . . . .	16,583	4	1
	Total, . . . . .	227,236	13	8

## FUND.

Agricultural Board and the Board of Technical Instruction (except a, b, d, e, f), for the purposes of Agriculture, Fisheries and other Instruction (Ireland) Act, 1899, 62 & 63 Vict., ch. 50, and other Acts.]

spect of the ENDOWMENT FUND for the Year ended 31st March, 1911.

Section of Act 42 & 63 Vict., c. 50.	PAYMENTS.	£ s d.		
16-1 (b.)	Purchasing and stocking additional land, and providing suitable buildings, fittings and appliances for the Munster Institution.	196	16	4
" (c.) i.	Grants sanctioned with the concurrence of the Board of Technical Instruction—			
" c.) ii.	County Boroughs.	15,943	1	10
—	Elsewhere than County Boroughs and making inquiries and collecting, &c., information for the purposes of Technical Instruction.	40,574	1	11
—	Ireland Development Grant: Grant in Aid for the purposes of Technical Instruction.	4,682	18	1
16-1 (d.)	Sea Fisheries.	9,957	4	9
—	Arklow Harbour Extension—Ireland Development Grant.	415	18	6
16-1 (e.)	Sea and Coast Fisheries Fund, 54 and 55 Vict., c. 48 (Advances).	10,972	7	10
16-1 (f.)	Superannuation of Officers transferred from National Education Office.	494	13	0
" (g.)	Travelling and Subsistence of Members of the Council and Boards.	499	10	8
—	Dunraven Scholarship Fund.	40	16	4
—	Suspense Account.	48	10	5
16-1 (g.)	Grants sanctioned with the concurrence of the Agricultural Board—			
	Agriculture and other Rural Industries (including Expenses incurred under Section 17)—			
	Agricultural Instruction:			
	Albert Agricultural College.	4,509	18	3
	Munster Institute.	1,482	0	6
	Athlone Agricultural Station.	871	4	2
	Ballyhaise do.	2,330	11	11
	Clonakilty do.	1,393	13	7
	Uster Dairy School.	2,335	12	9
	Agricultural Schools and Classes.	2,711	4	3
	Royal College of Science.	946	14	1
	Illustrated Instruction.	7,433	2	4
	Pioneer Lectures, Judging of Farms, &c.	1,733	1	10
	Forestry.	2,369	17	8
	Improvement of Live Stock.	7,906	13	5
	Insurance of Live Stock.	1	8	6
	Special Assistance to Agricultural and other Shows.	369	0	9
	Votes to County Committees:			
	Live Stock Schemes.	12,695	10	11
	Other Agricultural Schemes.	18,197	6	9
	Shows.	3,579	8	8
	General Administration.	4,775	12	7
	Improvement of Buttery Industry.	4,963	0	9
	Loans for Bulls, Stallions, Fencing, Spraying, Village Halls, Hand Separators, &c., and to Agricultural Credit Societies (Advances).	16,268	5	4
	Congregated Districts Schemes.	12,912	10	0
	Special Investigations.	5,177	1	0
	Rural and other Industries.	2,028	8	10
	Marine Works.	5,652	10	10
	Inland Fisheries.	2,865	16	5
	Travelling of Members of Special Committees.	109	1	2
	Expenses in connection with Fertilisers and Feeding			
	Stuffs, Food and Drugs, and other Acts.	3,145	11	6
	Interest of Irish Agricultural Produce.	2,520	17	8
	Marketing of Irish Produce.	454	13	9
	Miscellaneous Expenses.	5,471	6	0
		227,820	5	10
	BALANCE ON 31st MARCH, 1911.	49,416	7	10
	Total.	227,236	13	8

\* This sum includes the expenditure of a Grant of £10,500 from the Agricultural Board for Manual Instruction and the teaching of Domestic Economy in Rural Districts.

DETAILS OF SPECIAL INVESTIGATIONS (ENDOWMENT FUND) for the  
Year ended 31st March, 1911.

	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Flax Scheme, . . . . .	1,104 3 9	525 2 6	579 1 3
Feeding Experiments (pigs, calves, &c.), . . . . .	0 1 11	—	0 1 11
Cheese-making Experiments	79 1 0	—	79 1 0
Poultry Industry, . . . .	4,132 17 4	3,402 2 4	730 15 0
Potatoes, . . . . .	345 8 8	—	345 8 8
Horticulture, . . . . .	572 4 6	—	572 4 6
Tobacco Growing, . . . .	586 8 8	—	586 8 8
Seed Testing, . . . . .	681 7 4	37 13 4	643 14 0
Implements for Experiments, Purification of Creamery Sewage, . . . . .	81 15 2	—	81 15 2
Barley Experiments, . . . .	—	30 0 0	* 30 0 0
Wheat Experiments, . . . .	559 0 0	—	559 0 0
Oats Experiments, . . . . .	223 2 1	—	223 2 1
Winter Dairying Scheme, . .	10 10 0	—	10 10 0
Cattle Mortality (Diseases in Farm Animals; Royal Vet- erinary College Grant; Warble Experiments), . . .	436 0 4	—	436 0 4
Technical Aid to Industries (Dead Meat Trade, &c.), . .	295 5 5	—	295 5 5
Nitrogen Tests, &c. . . . .	52 8 11	—	52 8 11
	12 4 1	—	12 4 1
Total, . . . . .	9,171 19 2	3,994 18 2	5,177 1 0

\* Receipts.

DETAILS OF MISCELLANEOUS EXPENSES (ENDOWMENT FUND) for the  
Year ended 31st March, 1911.

Sub-Head.	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Journal and Leaflets, . . . .	371 16 0	—	371 16 0
Technical and Clerical As- sistance, . . . . .	3,433 7 11	—	3,433 7 11
Transit of Produce, . . . . .	356 12 1	12 0 1	344 12 0
Motor Service, . . . . .	213 7 9	0 3 0	213 4 9
Circulating School Exhibits, Erection of Notice Boards, carriage of leaflets, &c., . .	442 3 10	472 12 11	* 30 9 1
Railway, &c., Rates inquiries, Travelling of candidates tes- ted for appointments, . . .	6 8 8	—	6 8 8
Village Libraries, . . . . .	436 1 0	—	436 1 0
Village Halls, . . . . .	179 9 9	—	179 9 9
Inspection of Agricultural Credit Societies, . . . . .	17 18 5	—	17 18 5
Law Charges (execution of loan bonds, &c.), . . . . .	75 0 0	—	75 0 0
General, . . . . .	262 14 3	1 3 4	261 10 11
Employer's Liability In- surance, . . . . .	56 4 7	—	56 4 7
	37 12 5	12 18 10	24 13 7
Total, . . . . .	84 0 0	2 12 6	81 7 6
	5,972 16 8	501 10 8	5,471 6 0

\* Net receipt.



## SUMMARY OF LOAN ACCOUNTS on 31st March, 1911.

Nature of Loans.	Loans outstanding on 31st March, 1910.		Loans issued in 1910-11.		Principal repaid in 1910-11.	Interest received in 1910-11.	Loans outstanding on 31st March, 1911.	
	No.	Amount.	No.	Amount.			No.	Amount.
		£ s. d.		£ s. d.	£ s. d.	£ s. d.		£ s. d.
For the purchase of Halls.	334	6,350 13 2	251	5,311 17 4	4,579 5 11	167 15 2	396	7,583 4 7
For the purchase of Stallions.	82	4,326 18 2	32	3,145 2 3	1,528 3 10	114 14 7	103	6,443 16 7
To Agricultural Credit Societies.	137	10,023 0 0	1	150 0 0	1,737 4 5	291 9 3	118	8,415 15 7
For the erection of Fencing.	164	2,401 10 0	70	1,244 0 0	425 7 9	76 0 10	233	3,220 2 3
For the erection of Pasture Plant in Creameries.	1	152 0 0	—	—	—	—	1	152 0 0
For Hand Separators.	66	371 10 1	27	218 17 2	211 17 1	12 18 4	80	573 10 2
For Horse Spraying Machines.	101	617 16 4	11	98 17 3	333 18 10	18 3 3	90	380 14 9
For Industrial Development.	3	2,564 11 3*	—	—	21 10 3	1 7 1	2	543 1 0*
For erection of Village Halls.	8	1,340 0 0	2	300 0 0	147 10 0	20 10 11	4	1,512 10 0
For repairing & equipping Scotch Mills.	2	180 0 0	—	—	86 0 0	5 1 7	2	144 0 0
Total.	893	28,547 19 0	374	10,346 14 0	9,020 13 1	708 1 0	1039	26,773 14 11

## SEA AND COAST FISHERIES FUND LOANS:

Amount of Promissory Notes outstanding on 31st March, 1911. £17,728 17 10 representing 368 loans.

## BULLS SOLD UNDER SPECIAL SCHEME FOR CONGESTED DISTRICTS:

Maximum sum outstanding for 69 bulls sold. £1,000 0 0

reducible if certain conditions are complied with to 414 0 0

\*The sum of £1,000 lent in respect of the Irish Industrial Section of the Franco-British Exhibition, and conditionally repayable, was written off with the concurrence of the Agricultural Board in April, 1910.

## STATEMENT OF SECURITIES HELD ON 31st MARCH, 1911

## FUND FOR WHICH SECURITY IS HELD.

	£ s. d.	
Local Loans Stock	150,000 0 0	Endowment
Guaranteed Land Stock (Mature)	67,852 12 4	ditto.
Guaranteed 2½ % Stock, 1903	38,593 19 1	ditto.
Consols	20,500 0 0	ditto.
Total	£276,446 11 5	

# DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

## COUNCIL AND BOARDS, 1911.

### I.—COUNCIL OF AGRICULTURE.

Arranged in Alphabetical Order according to Provinces.

### II.—COUNCIL OF AGRICULTURE.

Arranged according to Counties, &c.

### III.—AGRICULTURAL BOARD.

### IV.—BOARD OF TECHNICAL INSTRUCTION.

### V.—CONSULTATIVE COMMITTEE OF EDUCATION.

## I.—COUNCIL OF AGRICULTURE, 1911.

[104 Members, including the President and Vice-President.]

Arranged in Alphabetical Order according to Provinces.

### LEINSTER (36 Members).

Bolger, John. Ferns, Co. Wexford.

Briscoe, Algernon T. F., J.P. Curristown House, Killucan, Co. Westmeath.

Brown, Stephen J., M.A., J.P. Ard Caien, Naas, Co. Kildare.

Bryan, Captain Loftus A., J.P., D.L. Upton, Gorey, Co. Wexford.

Butler, John, J.P. Minauns, Callan, Co. Kilkenny.

Byrne, Thomas J., J.P. Rossmakea, Dundalk, Co. Louth.

Carew, Thomas M. Kildangan, Kinnegad, Co. Westmeath.

Cogan, Denis J. 115 Thomas Street, Dublin.

Corbet, William M. Killeigh, Tullamore, King's County.

Delany, Thomas W. Longford.

Dooley, James G. Hoodsgrove, Rosbercon, New Ross, Co. Wexford.

Downes, Robert, J.P. Russellstown, Mullingar, Co. Westmeath.

Everard, Colonel Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath.

Ffrench, Peter, J.P., M.P. Harpoonstown, Bridgetown, Wexford.

Field, William, M.P. Blackrock, Co. Dublin.

Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin.

FitzGerald, The Right Hon. Lord Frederick, J.P. Carton, Maynooth, Co. Kildare.

Galvin, James. Mount Avon, Rathdrum, Co. Wicklow.

Hanlon, Patrick. Grangeforth, Carlow.

Horan, Michael J., J.P. Mile Tree, Birr, King's County.

Kavanagh, Walter M.M., J.P., D.L. Borris House, Borris, Co. Carlow.

Kennedy, Patrick J., J.P. Rathcore House, Enfield, Co. Meath.

- King, Nicholas B., J.P. Knoekdillon, Knoekbridge, Dundalk, Co. Louth.
- M'Carthy, James, J.P. Newfoundwell, Drogheda, Co. Louth.
- MaeMahon, James, J.P. Ballyroan, Abbeyleix, Queen's County.
- Massereene and Ferrard, The Right Hon. Viscount, D.S.O., J.P., Oriel Temple, Collon, Co. Louth.
- Mechan, Patrick A., J.P., M.P. Maryborough, Queen's County.
- Minch, Matthew J., J.P. Roekfield House, Athy, Co. Kildare.
- Mooney, Joseph, J.P. Cabra Lodge, Cabra, Co. Dublin.
- Murphy, George F., J.P. The Grange, Dunsany, County Meath.
- O'Neill, Patrick J., J.P. Kinscally House, Malahide, Co. Dublin.
- Peacocke, Charles H., J.P. Belmont, Wexford.
- Reynolds, Henry. Ballinalee, Edgeworthstown, Co. Longford.
- Ronaldson, William R. Barn Hall, Leixlip, Co. Kildare.
- Ross, James, J.P. Newport, Lenamore, Co. Longford.
- Wallace, Hugh, 13 D'Olier Street, Dublin.

### ULSTER (27 Members).

- Andrews, The Right Hon. Thomas, P.C., D.L. Ardara, Comber, Co. Down.
- Baillie, William. Martray Manor, Ballygawley, Co. Tyrone.
- Barbour, Frank. Annebrook, Mullingar, Co. Westmeath.
- Barbour, Harold A. M., M.A. Strathearne, Dunmurry, Co. Antrim.
- Barrie, Hugh T., J.P., M.P. Manor House, Coleraine, Co. Londonderry.
- Campbell, Rev. E. F., M.A. Killyman Rectory, Moy, Co. Tyrone.
- Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co. Londonderry.
- Davison, Joseph. Bellaghy, Co. Londonderry.
- Huston, Robert T., M.R.C.V.S. The Mall, Armagh.
- Jordan, Jeremiah, M.P. Enniskillen, Co. Fermanagh.
- Keenan, John, J.P. Leitrim, Castledawson, Co. Londonderry.
- Lynch, Francis J. Ballyjamesduff, Co. Cavan.
- M'Canee, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim.
- M'Clure, Thomas A., J.P. Rose Lodge, Killylea, Co. Armagh.
- M'Glynn, The Rt. Rev. Monsignor, P.P., V.G. Parochial House, Stranorlar, Co. Donegal.
- M'Kenna, T. P., J.P. Mullagh, Kells.
- Montgomery, H. de F., J.P., D.L. Blessingbourne, Fivemiletown, Co. Tyrone.
- Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone.
- O Ciarain, Rev. Lorean, P.P. Roekeorry, Co. Monaghan.
- Patrick, Captain John, J.P. Dunminning, Glarryford, Co. Antrim.
- Porter, John Porter, J.P., D.L. Belleisle, Lisbellaw, Co. Fermanagh.
- Reade, Robert H. S., J.P., D.L. Wilmont, Dunmurry, Co. Antrim.
- Sharnan-Crawford, Colonel R. G., J.P., D.L. Crawfordsburn, Co. Down.
- Sheils, Michael, J.P. Springhill Farm, Bangor, Co. Down.
- Smyth, William, J.P. Brookfield, Banbridge, Co. Down.
- Stoney, Captain T. Butler, J.P., D.L. Oakfield Park, Raphoe, Co. Donegal.
- Toal, Thomas, J.P. Smithboro', Monaghan.

**MUNSTER (24 Members).**

- Byrne, James, J.P. Wallstown Castle, Castletownroche, Co. Cork.  
 Coghlan, Captain William C., J.P. Dromina, Rosduff, Co. Waterford.  
 Connery, Maurice, M.D., J.P. Kilfinane, Co. Limerick.  
 Corcoran, Thomas, J.P. Honey Mount, Roscrea, Co. Tipperary.  
 Cummins, Edmond, J.P. Brookhill, Fethard, Co. Tipperary.  
 Duggan, Thomas. The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.  
 Hogan, Patrick J., J.P. Coolreagh, Bodyke, Co. Clare.  
 Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork.  
 McDonald, William, J.P. Laharan, Minane Bridge, Carrigaline, Co. Cork.  
 Mescal, Michael, J.P. Dromelihiy, Cooraclare, Co. Clare.  
 Moclair, Patrick. John Street, Cashel, Co. Tipperary.  
 Monteagle, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick.  
 Nolan, Michael J., J.P. Moyvane House, Newtownsandes, Co. Kerry.  
 Nugent, Edmond, J.P. Ballymacarbery, Clonmel, Co. Tipperary.  
 O'Callaghan, Cornelius, J.P. Altamount House, Millstreet, Co. Cork.  
 O'Dwyer, William White, J.P. Spring House, Ballylanders, Co. Limerick.  
 O'Gorman, David Leo. Janeville, Fermoy, Co. Cork.  
 O'Gorman, George. Killneedan, Ballyhar, Co. Kerry.  
 O'Mara, Alderman Stephen. Limerick.  
 Power, Thomas. Dungarvan, Co. Waterford.  
 Ryan, Hugh P. Roskeen, Thurles, Co. Tipperary.  
 Sheehy, Timothy. Market Street, Skibbereen, Co. Cork.  
 Slaterry, Michael, J.P. Killerk, Lisronagh, Clonmel, Co. Tipperary.  
 Trench, George F., J.P. Abbeylands, Ardert, Co. Kerry.

**CONNACHT (15 Members).]**

- Clonbrock, The Right Hon. Lord, K.P., P.C., H.M.L. Clonbrock, Ahascragh, Co. Galway.  
 Costello, P. J., J.P. Cloghansmore House, Cloghans Hill, Tuam, Co. Galway.  
 Daly, Very Rev. Canon, D.D., P.P. Lavagh, Co. Sligo.  
 Digges, Rev. Joseph G., M.A. Clooncahir, Lough Rynn R.S.O., Co. Leitrim.  
 Flynn, Rev. Charles, P.P., V.F. Ballinamore, Co. Leitrim.  
 Galvin, John. Mount Talbot, Roscommon.  
 Gore-Booth, Sir Josslyn, Bart., D.L. Lissadell, Sligo.  
 Griffin, Thomas G. Gurteen, Ballinasloe, Co. Galway.  
 Kennedy, Cornelius J., Dunmore, Co. Galway.  
 MacGuire, James P. Rooskey, Dromod, Co. Leitrim.  
 Manly, Rev. P. J., C.C. Carriek-on-Shannon, Co. Leitrim.  
 Morrin, Daniel. Foxford, Co. Mayo.  
 Mulligan, Rev. Philip J., P.P. Carracastle, Ballaghaderreen, Co. Mayo.  
 Nolan, Colonel John P., J.P. Ballinderry, Tuam, Co. Galway.  
 O'Dowd, John, M.P. Bunnanadden, Co. Sligo.

## II.—COUNCIL OF AGRICULTURE, 1911.

[104 Members, including the President and Vice-President.]  
Arranged according to Counties, &c.

### LEINSTER (36 Members).

#### Members appointed by County Councils.

- Carlow*.—Kavanagh, Walter M'M., J.P., D.L. Borris House, Borris, Co. Carlow.  
Hanlon, Patrick. Grangeforth, Carlow.
- Dublin*.—O'Neill, Patrick J., J.P. Kinsealy House, Malahide, Co. Dublin.  
Mooney, Joseph, J.P. Cabra Lodge, Cabra, Co. Dublin.
- Kildare*.—Brown, Stephen J., M.A., J.P. Ard Caien, Naas, Co. Kildare.  
Minch, Matthew J., J.P. Rockfield House, Athy, Co. Kildare.
- Kilkenny*.—Butler, John, J.P. Minauns, Callan, Co. Kilkenny.  
Dooley, James G. Hoodsgrrove, Rosbercon, New Ross, Co. Wexford.
- King's County*.—Horan, Michael J. J.P. Mile Tree, Birr, King's County.  
Corbet, William M. Killeigh, Tullamore, King's County
- Longford*.—Reynolds, Henry. Ballinalee, Edgeworthstown, Co. Longford.  
Ross, James, J.P. Newport, Lenamore, Co. Longford.
- Louth*.—King, Nicholas B., J.P. Knockdillon, Knockbridge, Dundalk, Co. Louth.  
M'Carthy, James, J.P. Newfoundwell, Drogheda, Co. Louth.
- Meath*.—Everard, Colonel Sir Nugent T., Bart., H.M.L. Randles-town, Navan, Co. Meath.  
Kennedy, Patrick J., J.P. Rathcore House, Enfield, Co. Meath.
- Queen's County*.—Meehan, Patrick A., J.P., M.P. Maryborough, Queen's County.  
MacMahon, James, J.P. Ballyroan, Abbeyleix, Queen's County.
- Westmeath*.—Downes, Robert, J.P. Russellstown, Mullingar, Co. Westmeath.  
Briscoc, Algernon T. F., J.P. Curristown House, Kilmacan, Co. Westmeath.
- Wexford*.—Peacocke, Charles H., J.P. Belmont, Wexford.  
Bolger, John. Ferns, Co. Wexford.
- Wicklow*.—Cogan, Denis J. 115, Thomas-street, Dublin.  
Galvin, James. Mount Avon, Rathdrum, Co. Wicklow.

#### Members appointed by the Department.

- Bryan, Captain Loftus A., J.P., D.L. Upton, Gorey, Co. Wexford  
Byrne, Thomas J., J.P. Rossmakea, Dundalk, Co. Louth.  
Carew, Thomas M. Kildangan, Kinnegad, Co. Westmeath.  
Delany, Thomas W. Longford.  
Firench, Peter, J.P., M.P. Harpoonstown, Bridgetown, Wexford.

## LEINSTER—Continued.

## Members appointed by the Department.—Continued.

- Field, William, M.P. Blackrock, Co. Dublin.  
 Finlay, Rev. T. A., M.A. 35 Lower-Leeson Street, Dublin.  
 FitzGerald, The Rt. Hon. Lord Frederick, J.P. Carton, Maynooth, Co. Kildare.  
 Massereene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P. Oriel Temple, Collon, Co. Louth.  
 Murphy, George F., J.P. The Grange, Dunsany, Co. Meath.  
 Ronaldson, William R. Barn Hall, Leixlip, Co. Kildare.  
 Wallace, Hugh. 13 D'Olier Street, Dublin.

## ULSTER (27 Members).

## Members appointed by County Councils.

- Antrim*.—Barbour, Harold A. M., M.A. Strathearne, Dunmurry, Co. Antrim.  
 Patrick, Captain John, J.P. Dunminning, Glarryford, Co. Antrim.  
*Armagh*.—Huston, Robert T., M.R.C.V.S. The Mall, Armagh.  
 M'Clure, Thomas A., J.P. Rose Lodge, Killylea, Co. Armagh.  
*Cavan*.—M'Kenna, T. P., J.P. Mullagh, Kells.  
 Lynch, Francis J. Ballyjamesduff, Co. Cavan.  
*Donegal*.—Stoney, Capt. T. Butler, J.P., D.L. Oakfield Park, Raphoe, Co. Donegal.  
 M'Glynn, The Rt. Rev. Monsignor, P.P., V.G. Parochial House, Stranorlar, Co. Donegal.  
*Down*.—Andrews, Rt. Hon. Thos., P.C., D.L. Ardara, Comber, Co. Down.  
 Smyth, William, J.P. Brookfield, Banbridge, Co. Down.  
*Fermanagh*.—Porter, John Porter, J.P., D.L. Belleisle, Lisbellaw, Co. Fermanagh.  
 Jordan, Jeremiah, M.P. Enniskillen, Co. Fermanagh.  
*Londonderry*.—Barrie, Hugh T., J.P., M.P. Manor House, Coleraine, Co. Londonderry.  
 Keenan, John, J.P. Leitrim, Castledawson, Co. Londonderry.  
*Monaghan*.—O Ciarain, Rev. Lorean, P.P. Rockecorry, Co. Monaghan.  
 Toal, Thomas, J.P. Smithboro', Monaghan.  
*Tyrone*.—Montgomery, H. de F., J. P., D.L. Blessingbourne, Five-miletown, Co. Tyrone.  
 Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone.

## Members appointed by the Department.

- Baillie, William. Martray Manor, Ballygawley, Co. Tyrone.  
 Barbour, Frank. Annebrook, Mullingar, Co. Westmeath.  
 Campbell, Rev. E. F., M.A. Killyman Rectory, Moy, Co. Tyrone.  
 Clark, Alexander L., J.P. Moyola Lodge, Castledawson, Co. Londonderry.  
 Davison, Joseph. Bellaghy, Co. Londonderry.  
 McCance, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim.  
 Reade, Robert H. S., J.P., D.L. Wilmont, Dunmurry, Co. Antrim.  
 Sharman-Crawford, Col. R. G. J.P., D.L. Crawfordsburn, Co. Down.  
 Sheils, Michael, J.P. Springhill Farm, Bangor, Co. Down.

**MUNSTER (24 Members).****Members appointed by County Councils.**

- Clare*.—Hogan, Patrick J., J.P. Coolreagh, Bodyke, Co. Clare.  
 Mescal, Michael, J.P. Dromelihiy, Cooraclare, Co. Clare.
- Cork*.—O'Callaghan, Cornelius, J.P. Altamount House, Millstreet, Co. Cork.  
 M'Donald, William, J.P. Laharan, Minane Bridge, Carrigaline, Co. Cork.  
 O'Gorman, David Leo, Janeville, Fermoy, Co. Cork.  
 Sheehy, Timothy, Market Street, Skibbereen, Co. Cork.
- Kerry*.—O'Gorman, George. Kilncedan, Ballyhar, Co. Kerry.  
 Nolan, Michael J., J.P. Moyvane House, Newtownsandes, Co. Kerry.
- Limerick*.—Connery, Maurice, M.D., J.P. Kilfinane, Co. Limerick.  
 O'Dwyer William White, J.P. Spring House, Ballylanders, Co. Limerick.
- Tipperary, N.R.*—Corcoran, Thomas, J.P. Honeymount, Roscrea, Co. Tipperary.  
 Duggan, Thomas. The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.
- Tipperary, S.R.*—Slattery, Michael, J.P. Killerk, Lisronagh, Clonmel, Co. Tipperary.  
 Moelair, Patrick. John Street, Cashel, Co. Tipperary.
- Waterford*.—Power, Thomas. Dungarvan, Co. Waterford.  
 Nugent, Edmond, J.P. Ballymacarbery, Clonmel, Co. Tipperary.

**Members appointed by the Department.**

- Byrne, James, J.P. Wallstown Castle, Castletownroche, Co. Cork.  
 Coghlan, Captain Wm. C., J.P. Dromina, Rossduff, Co. Waterford.  
 Cummins, Edmond, J.P. Brookhill, Fethard, Co. Tipperary.  
 Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork.  
 Monteagle, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick.  
 O'Mara, Alderman Stephen. Limerick.  
 Ryan, Hugh P. Roskeen, Thurles, Co. Tipperary.  
 Trench, George F., J.P. Abbeylands, Ardfert, Co. Kerry.

**CONNACHT (15 Members).****Members appointed by County Councils.**

- Galway*.—Kennedy, Cornelius J. Dunmore, Co. Galway.  
 Griffin, Thomas G. Gurteen, Ballinasloe, Co. Galway.
- Leitrim*.—Manly, Rev. P. J., C.C. Carrick-on-Shannon, Co. Leitrim.  
 Flynn, Rev. Charles, P.P., V.F. Ballinamore, Co. Leitrim.
- Mayo*.—Costello, P. J., J.P. Cloghansmore House, Cloghans Hill, Tuam, Co. Galway.  
 Morrin, Daniel. Foxford, Co. Mayo.
- Roscommon*.—Galvin, John. Mount Talbot, Rosecommon.  
 MacGuire, James P. Rooskey, Dromod, Co. Leitrim.
- Sligo*.—O'Dowd, John, M.P. Bunnanadden, Co. Sligo.  
 Daly, Very Rev. Canon, D.D., P.P. Lavagh, Co. Sligo.

## CONNACHT—Continued.

## Members appointed by the Department.

- Clonbrock, The Right Hon. Lord, K.P., P.C., H.M.L. Clonbrock, Ahascragh, Co. Galway.  
 Digges, Rev. Joseph G., M.A. Clooncahir, Lough Rynn R.S.O., Co. Leitrim.  
 Gore-Booth, Sir Josslyn, Bart., D.L. Lissadell, Sligo.  
 Mulligan, Rev. Philip J., P.P. Carracastle, Ballaghaderreen, Co. Mayo.  
 Nolan, Colonel John P., J.P. Ballinderry, Tuam, Co. Galway.

## III.—AGRICULTURAL BOARD.

(14 Members.\*)

- Daly, Very Rev. Canon, D.D., P.P. Lavagh, Co. Sligo. *Appointed by Connacht Provincial Committee.*  
 Downes, Robert, J.P. Russellstown, Mullingar. *Appointed by Leinster Provincial Committee.*  
 Everard, Col. Sir Nugent T., Bart., H.M.L. Randlestown, Navan, Co. Meath. *Appointed by the Department.*  
 Gore-Booth, Sir Josslyn, Bart., D.L. Lissadell, Sligo. *Appointed by the Department.*  
 Healy, His Grace The Most Rev. John, D.D., Lord Archbishop of Tuam. St. Jarlath's, Tuam, Co. Galway. *Appointed by Connacht Provincial Committee.*  
 Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross. Bishop's House, Skibbereen, Co. Cork. *Appointed by Munster Provincial Committee.*  
 McCance, John S. F., J.P. Woodbourne, Dunmurry, Co. Antrim. *Appointed by Ulster Provincial Committee.*  
 M'Donald, William, J.P. Laharan, Minane Bridge, Carrigaline, Co. Cork. *Appointed by Munster Provincial Committee.*  
 Monteagle, The Right Hon. Lord, K.P., D.L. Mount Trenchard, Foynes, Co. Limerick. *Appointed by the Department.*  
 Montgomery, H. de F., D.L. Blessingbourne, Fivemiletown, Co. Tyrone. *Appointed by Ulster Provincial Committee.*  
 Murnaghan, George, J.P. Lisanelly House, Omagh, Co. Tyrone. *Appointed by the Department.*  
 O'Neill, Patrick J., J.P. Kinsealy House, Malahide, Co. Dublin. *Appointed by Leinster Provincial Committee.*

## IV.—BOARD OF TECHNICAL INSTRUCTION.

(23 Members.\*)

- Barbour, Frank. Annebrook, Mullingar, Co. Westmeath. *Appointed by Ulster Provincial Committee.*  
 Clancy, Most Rev. John, D.D., Lord Bishop of Elphin. St. Mary's, Sligo. *Appointed by Connacht Provincial Committee.*  
 Crozier, James, J.P., V.S. 26 Montpelier Hill, Dublin. *Appointed by Dublin County Borough Council.*  
 Dickson, Alexander. 15 Parliament Street, Dublin. *Appointed by Dublin County Borough Council.*

\* By section 24 (2) of the Agriculture and Technical Instruction (Ireland) Act 1899, the President and Vice-President of the Department are ex-officio Members of the Board.



# BOARD OF TECHNICAL INSTRUCTION—Continued.

- Donnellan, Thomas. Thomond Gate, Limerick. *Appointed by Limerick County Borough Council.*
- Dunn, Christopher J., J.P. 1 Mount Verdon Terrace, Wellington Road, Cork. *Appointed by the Department.*
- Evans, Rev. Henry, D.D., M.R.I.A., F.I.H. St. Helen's, Blackrock, Co. Dublin. *Appointed by Commissioners of National Education.*
- Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin. *Appointed by Leinster Provincial Committee.*
- Glynn, Joseph A., B.A. Beech House, Tuam, Co. Galway. *Appointed by the Department.*
- Good, John. The Moorings, Merrion Road, Dublin. *Appointed by Joint Committee of Councils of the Co. Dublin Urban Districts.*
- Henderson, Sir James, A.M., D.L. Oakley House, Windsor Park, Belfast. *Appointed by the Department.*
- Johnston, Sir John Barr, J.P. Londonderry. *Appointed by Londonderry County Borough Council.*
- Macartney, William, J.P. 33 Cliftonville Road, Belfast. *Appointed by Belfast County Borough Council.*
- McClelland, John A., M.A., D.Sc., F.R.S. Rostrevor, Orwell Road, Rathgar, Co. Dublin. *Appointed by the Department.*
- Mercier, Alderman Samuel T., J.P. 2 Mount Clifton, Cliftonville Road, Belfast. *Appointed by Belfast County Borough Council.*
- O Ceallaigh, Seaghan T. 8 Belvedere Avenue, Dublin. *Appointed by Dublin County Borough Council.*
- Power, Thomas. Dungarvan, Co. Waterford. *Appointed by Munster Provincial Committee.*
- Sheehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore. Bishop's House, Waterford. *Appointed by Waterford County Borough Council.*
- Sisk, Richard. Evergreen Villas, Cork. *Appointed by Cork County Borough Council.*
- Starkie, William J. M., M.A., Litt.D. Tyrone House, Marlborough Street, Dublin. *Appointed by Intermediate Education Board.*
- Taylor, Alexander. 131 Donegall Street, Belfast. *Appointed by Belfast County Borough Council.*

## V.—CONSULTATIVE COMMITTEE OF EDUCATION.

(5 Members.)

- The Right Hon. T. W. Russell, P.C., M.P.; Vice-President of the Department. Department of Agriculture and Technical Instruction, Dublin. *Ex-officio.*
- Starkie, William J. M., M.A., Litt.D. Tyrone House, Marlborough St., Dublin. *Appointed by Commissioners of National Education.*
- Finlay, Rev. T. A., M.A. 35 Lower Leeson Street, Dublin. *Appointed by Intermediate Education Board.*
- McClelland, John A., M.A., D.Sc., F.R.S. Rostrevor, Orwell Road, Rathgar, Co. Dublin. *Appointed by Board of Technical Instruction.*
- Gill, T. P. Department of Agriculture and Technical Instruction, Dublin. *Appointed by Agricultural Board.*

## AGRICULTURE

TABLE showing by Counties the Agricultural Schemes adopted tember, 1911; the amount allocated from the joint fund allocation chargeable to local contributions and to the

County.	Itinerant Instruction in Agriculture.	Winter Agricultural Classes.	Poultry.	Butter-making.	Horticulture and Bee-keeping.	Cottage and Farm Prizes.
	£	£	£	£	£	£
Antrim, . . . . .	580	70	400	—	140	—
Armagh, . . . . .	396	60	249	—	401	—
Carlow, . . . . .	290	50	161	72	164	—
Cavan, . . . . .	340	150	295	105	300	194
Clare, . . . . .	530	60	310	250	200	275
Cork, . . . . .	(a) 1,640	426	704	246	654	200
Donegal, . . . . .	335	—	519	140	(b) 466	600
Down, . . . . .	(c) 700	250	342	92	273	320
Dublin, . . . . .	370	—	—	—	151	50
Fermanagh, . . . . .	310	30	322	—	280	100
Galway, . . . . .	590	120	580	180	250	405
Kerry, . . . . .	350	100	400	170	205	135
Kildare, . . . . .	320	—	206	102	(c) 675	328
Kilkenny, . . . . .	(f) 390	315	246	124	284	142
King's, . . . . .	306	40	*258	—	190	60
Leitrim, . . . . .	300	40	164	125	155	132
Limerick, . . . . .	(g) 953	135	318	—	198	162
Londonderry, . . . . .	310	50	278	170	197	200
Longford, . . . . .	280	20	*256	—	200	70
Louth, . . . . .	385	50	320	199	212	30
Mayo, . . . . .	590	100	590	140	(h) 370	310
Meath, . . . . .	(j) 665	180	354	154	237	550
Monaghan, . . . . .	400	—	309	100	228	140
Queen's, . . . . .	295	50	*263	—	167	150
Roscommon, . . . . .	330	60	450	170	210	237½
Sligo, . . . . .	305	60	237	—	220	216
Tipperary (N.R.), . . . . .	(k) 480	200	270	93	245	150
Tipperary (S.R.), . . . . .	(l) 465	100	*302	45	209	248
Tyrone, . . . . .	615	180	261	155	250	150
Waterford, . . . . .	320	50	187	126	188	45
Westmeath, . . . . .	(n) 355	110	375	160	185	263½
Wexford, . . . . .	(o) 1,080	120	343	143	304	300
Wicklow, . . . . .	352	—	274	141	176	100
Totals, . . . . .	15,927	3,176	10,543	3,402	8,484	6,263

\* Includes Butter-making.

(a) Includes £550 for Prizes under Tillage Scheme.

(az) Includes £15 Grant to Village Hall.

(b) Includes £267 for Shelter Belts.

(c) Includes £15 Grant to Farmers' Institutes and £350 Scholarships to Farm School.

(d) Includes £250 Grant from "Henry Trust Fund."

(e) Includes £174 for School Gardens, £50 for Teachers' Class and £100 for Shelter Belts.

(f) Includes £50 Scholarship at Glasnevin.

(g) Includes £253 Tillage Demonstration Scheme, £50 of which is a contribution from Limerick Endowment Fund.

## APPENDICES :—

by the several County Committees for the year ended 30th Sep-  
for the purpose of each Scheme and the proportions of the total  
Department's Grant respectively.

Live Stock.	Sub- sidies to Shows.	Flax.	General Admin- istration, includ- ing Secretaries' salaries and expense	Totals.	Contri- butions from Rates.	Contri- bution from Depart- ment.	Rates raised.
£	£	£	£	£	£	£	£
1,160	275	—	405	3,030	1,390	1,640	(q) 1,859
655	5	100	380	2,246	953	1,293	(q) 1,110
233	100	—	170	1,240	400	840	650
662	194	—	280	2,520	971	1,549	1,106
750	210	—	275	2,860	1,014	1,846	(q) 964
1,575	650	30	(az) 535	6,660	1,785	4,875	(r) 2,135
842	300	200	361	3,763	1,592	2,171	1,280
1,385	385	200	495	(d) 4,442	1,784	(d) 2,658	(q) 2,100
695	175	—	205	1,646	515	1,131	(r) 812
545	155	25	195	1,962	674	1,288	950
980	250	—	270	3,625	1,489	2,136	1,800
950	150	—	260	2,720	774	1,946	1,162
485	200	—	355	2,571	1,054	1,517	1,400
735	260	—	330	2,826	1,315	1,511	1,435
425	90	—	294	1,663	651	1,012	930
380	60	—	176	1,532	398	1,134	578
865	200	—	307	3,138	1,135	2,003	1,900
720	205	100	370	2,600	1,110	1,490	1,229
295	122	—	170	1,413	560	853	592
346	124	—	210	1,876	985	891	800
690	235	—	(i) 485	3,510	1,293	2,217	1,213
790	250	—	324	3,504	1,680	1,824	(q) 1,680
568	168	80	255	2,248	921	1,327	1,060
465	150	—	235	1,775	650	1,125	1,070
576	160	—	274	2,467½	907½	1,560	1,223
420	120	—	230	1,808	580	1,228	800
585	150	—	265	2,438	1,048	1,390	1,140
878	240	—	307	2,794	1,468	1,326	1,540
(m) 1,120	300	100	495	3,626	1,460	2,166	1,710
450	100	—	250	1,716	716	1,000	1,080
636	200	—	215	2,499½	1,116	1,383½	1,314
805	360	—	(p) 355	3,810	1,960	1,850	1,480
571	127	—	281	2,022	810	1,212	1,063
23,237	6,670	835	10,014	88,551	35,158½	53,392½	—

(A) Includes £40 for Shelter Belts.

(i) Includes £135 for Spraying Machines.

(j) Includes £300 for Prizes under Tillage Farm Scheme.

(k) Includes £120 Scholarships for Boys and Girls.

(l) Includes £40 Scholarship at Dundrum Convent.

(m) Includes £30 entirely from Department's Funds.

(n) Includes £45 for Instruction in Bacon Curing.

(o) Includes £50 for Veterinary Lectures, £400 for Veterinary Dispen-  
saries, and £60 Scholarships at Clonakilty.

(p) Includes £50 Grants to Village Halls.

(q) Rate ½d. in the £ } In all other cases, the rate is 1d. in the £.

(r) „ ½d. „ „ }

RETURN showing the Number of Instructors, &c., employed in each County in connection with Agricultural Schemes during the year 1910-1911.

County.	Agriculture.	Teachers of Agricultural Classes.	Poultry-keeping only.	Poultry-keeping and Butter-making.	Butter-making only.	Horticulture only.	Horticulture and Bee-keeping.	Bee-keeping only.
Antrim, . . .	2	(a)	1	-	-	-	1	-
Armagh, . . .	1	(a)	1	-	-	1	1	-
Carlow, . . .	1	(a)	-	1	-	-	1	-
Cavan, . . .	1	1	1	-	1	1	-	1
Clare, . . .	1	(a)	1	-	2	-	1	-
Cork, . . .	3	(a) 2	2	-	2	-	3	-
Donegal, . . .	1	-	-	2	-	-	1	-
Down, . . .	1	(a)	-	1	-	-	1	-
Dublin, . . .	1	-	-	-	-	-	1	-
Fermanagh, . . .	1	(a)	1	-	-	-	1	-
Galway, . . .	1	(a)	-	1	1	-	1	-
Kerry, . . .	1	(a)	1	-	1	-	1	-
Kildare, . . .	1	-	-	1	-	1	1	-
Kilkenny, . . .	1	(a) 1	-	1	-	1	-	1
King's, . . .	1	(a)	-	1	-	-	1	-
Leitrim, . . .	1	(a)	1	-	1	-	-	-
Limerick, . . .	2	(a)	1	-	-	-	1	-
Londonderry, . . .	1	(a)	1	-	1	-	1	-
Longford, . . .	1	(a)	-	1	-	-	1	-
Louth, . . .	1	(a)	1	-	1	-	1	-
Mayo, . . .	2	(a)	-	1	1	-	1	-
Meath, . . .	1	1	1	-	1	-	1	-
Monaghan, . . .	1	-	1	-	1	-	1	-
Queen's, . . .	1	(a)	-	1	-	-	1	-
Roscommon, . . .	1	(a)	-	2	-	-	1	-
Sligo, . . .	1	(a)	1	-	-	-	1	-
Tipperary (N R.)	1	(a)	-	1	-	-	1	-
" (S.R.)	1	(a)	-	1	-	-	1	-
Tyrone, . . .	* 2	(a)	-	1	-	-	1	-
Waterford, . . .	1	(a)	-	1	-	-	1	-
Westmeath, . . .	1	-	1	-	1	-	1	-
Wexford, . . .	2	(a)	1	-	1	-	1	1
Wicklow, . . .	1	-	1	-	1	-	1	-
	40	5	18	17	16	4	32	3

(a) The Instructors in Agriculture conducted classes in these Counties.

\* One of these Instructors was employed in Co. Tyrone for portion of year only.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

## ROYAL COLLEGE OF SCIENCE, DUBLIN.

Session 1910-11.

SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE,  
FORESTRY AND CREAMERY MANAGEMENT.

A limited number of scholarships will be offered in 1910 for competition among young men in Ireland who desire to acquire a thorough knowledge of technical Agriculture, and, in addition, one or more scholarships will be provided for students who intend to specialise in either Horticulture, Forestry, or Creamery Management. Each scholarship includes—(1) free admission to the first year's course of instruction in the College, (2) one third-class railway fare to Dublin at the beginning of the session, and one third-class fare from Dublin at the end of the session, and (3) either of the following at the option of the Department—(a) a maintenance allowance of one guinea per week while in attendance at the Royal College of Science or elsewhere, as the Department may decide; or (b) free board and residence at one of the Department's institutions; in the latter case a small grant will be made to each student towards the cost of books and apparatus.

A scholarship is tenable for one year, but selected candidates must undergo a probationary course of one term of about three months. If satisfactory progress be made by the holder, the scholarship may be renewed for a second, for a third, and, in certain circumstances, even for a fourth year, to enable the student to complete his course.

The Department do not undertake to employ, or find employment for, students at the close of the period of training.

Holders of these scholarships will be subject to the regulations made from time to time at the Royal College of Science, and will be required to devote their whole time to the course of study prescribed for them by the Department.

Candidates, who should be between 18 and 30 years of age on the 1st September, 1910, must make application on a form, which may be obtained from the Registrar, Royal College of Science, Dublin, after the 1st February, 1910, and which should be returned not later than the 3rd August, 1910.

Candidates must have been born in Ireland or have been resident in Ireland for three years immediately prior to the 1st June, 1910.

The examination will take place in Dublin, on the 17th, 18th, and 19th August, 1910. No expenses in connexion with attendance at this examination will be allowed.

Candidates will be tested in the following :—

## A.—ENGLISH.

- (1) Composition—to be tested by an essay.
- (2) Grammar—Etymology, and the principles of Syntax.
- (3) Literature—the following works :—(a) Dickens, "A Tale of Two Cities"; (b) Shakespeare, "Julius Caesar."

## B.—One of the following :—

LATIN;  
IRISH;  
FRENCH;  
GERMAN.

In these languages the papers will comprise—

- (1) Passages for translation from the following texts :—  
 Latin—Cæsar, "De Bello Gallico" (Book V.).  
 Irish—míleáil o míle—' Góráirí Mac Rí's Éiríann."  
 French—Enault, "Le chien du Capitaine."  
 German—Hauff, "Das Wirthshaus im Spessart."
- (2) Easy passages for translation into English from other texts.
- (3) Questions in Grammar—Accidence and the principal rules of Syntax.
- (4) Short sentences for translation from English.

#### C.—MATHEMATICS.

- (1) Arithmetic—including Mensuration of simple plane figures and rectangular solids.
- (2) Algebra—to quadratic equations inclusive.
- (3) Plane Geometry—to be tested partly by questions requiring formal proofs of propositions from Euclid. I-III., and partly by practical problems to be solved by compasses and scale of equal parts.

D.—Practical experience of one of the following :—

AGRICULTURE ;  
 HORTICULTURE ;  
 FORESTRY ;  
 DAIRYING AND CREAMERY MANAGEMENT.

Each applicant must have had substantial experience of practical work in connexion with farming, gardening, the management of woodlands, or dairying and creamery management. The examination may be written, oral, and practical. The subjects will include all the ordinary work of farms, gardens, woods, or dairies, as practised in Ireland.

*N.B.*—On no account will a scholarship be awarded to a candidate who fails to attain a high standard in the subject he selects for this portion of the examination ; while excellence in that subject will be taken into consideration in case of deficiency in one or more of the others.

#### E.—ABILITY TO IMPART INSTRUCTION :—

Gauged by the style of the answers in both the written and the oral examinations.

Candidates who are qualified for scholarships by their examination on the foregoing subjects will be required to submit to an examination by a medical officer appointed by the Department. A scholarship will not be awarded in any case where the candidate is certified to be physically unfit to undertake the prescribed course of studies.

Last date for receiving applications, 3rd August, 1910.

October, 1909.

#### SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE, FORESTRY, AND CREAMERY MANAGEMENT.

1910-11.

At the annual examination held on the 17th, 18th, and 19th August, 1910, for Scholarships in Agriculture, Horticulture, Forestry, and Creamery Management, tenable at the Royal College of Science, Dublin, seventy-two candidates presented themselves.

Scholarships in Agriculture were awarded to the following ten candidates :—

Best, Frederick W. G., The Cairn, Aghalee, Antrim.  
 Blake, Thomas, Albert Agricultural College, Glasnevin.  
 Dales, Hugh, Drumra House, Boardmills, Lisburn.  
 Fannon, Robert J., Albert Agricultural College, Glasnevin.  
 Healy, Thomas, Ballinaboy, Ballinacraig, Co. Cork.  
 Hennessy, Matthew, Albert Agricultural College, Glasnevin.  
 Kennedy, Edward J., Bantias, Cloughjordan, Co. Tipperary.  
 Lynch, Richard, West Street, Tallow, Co. Waterford.  
 O'Callaghan, Denis, Albert Agricultural College, Glasnevin.  
 Slattery, Patrick J., Albert Agricultural College, Glasnevin.

A Scholarship in Forestry was awarded to—

O'Beirne, Michael, Forestry Station, Avondale, Co. Wicklow.

No Scholarships were awarded in Horticulture or Creamery Management.

FORM A. 180 (a.)  
1910.

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### THE ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

SESSION, 1910-11.

The Albert Agricultural College is situated on the north side of Dublin in a healthy situation about 170 ft. above the sea level. It is easily reached by tram to the Glasnevin terminus, from which it is distant less than a mile. The College consists of a residence for between fifty and sixty students, together with a farm, orchard, and gardens, all covering an area of about 180 acres.

The College provides two distinct courses of instruction—one for farmers, the other for gardeners. The former or Agricultural Course occupies in the Department's scheme of agricultural education a position intermediate between the instruction given at the Agricultural Stations and that provided by the agricultural faculty of the Royal College of Science, Dublin. The Horticultural Course is intended for selected pupils who are seeking to qualify for the post of Instructor in Horticulture. (For particulars relative to the Horticultural Course see separate leaflet, A. 153a.)

### AGRICULTURAL COURSE.

This course is intended for young men who desire a technical and practical knowledge of agriculture, to fit them for entrance to the Royal College of Science, Dublin, for becoming farmers, or for engaging in any other occupation—such as creamery management—which requires technical training in the sciences underlying agriculture. It includes instruction in agriculture in the classroom, farmyard, and fields, supplemented by lessons in dairying, horticulture, poultry management, bee-keeping, and veterinary hygiene. The elements of physics, chemistry, botany, zoology, and entomology are taught so far as is necessary to the proper understanding of the principles underlying the most approved farmyard practice.

Instruction is also given in book-keeping, surveying, and wood-work, while literature, mathematics, and drawing receive such attention as is found requisite.

Every encouragement is given to the pursuit of athletics and to the development of social intercourse among the students.

The College discussion society meets frequently throughout the session. The papers read before it relate to topics of current interest to the farming community.

The library is supplied with standard works on agriculture, and copies of the best farming periodicals are procured regularly for the students' use.

**THE STAFF.**—The staff consists of Principal, House Masters, Agriculturist, and teachers of chemistry, botany, zoology, veterinary hygiene, horticulture dairying, poultry keeping, bee-keeping, and woodwork. A competent Drill Instructor attends twice weekly to see to the physical training of the students.

The Clergy of the different denominations also visit the College weekly to give religious instruction. The domestic comfort and bodily health of the students are under the care of an experienced Matron.

**THE SESSION.**—The course of study extends over at least one session. The session for the year 1910-11 will open on Tuesday, the 11th October, 1910, and end on Friday, the 11th August, 1911. There will be two intervals, each of about a fortnight, during which students will return to their homes—one at Christmas and the other at Easter.

**COLLEGE DIPLOMA.**—The College diploma is awarded partly on the result of the sessional examinations and partly on the work done throughout the year. It is of two classes, the first being reserved for those students who add to an intelligent grasp of scientific principles a high standard of skill in practical farm work.

Prizes are given by the Department for progress made, for work done and for services cheerfully rendered to the common weal. These prizes are awarded after consultation with the Principal, and not merely on marks obtained at the examination.

**CONDITIONS OF ADMISSION.**—Admission to the College is conditional on passing the entrance examination and furnishing evidence of good health and character. Only resident students who are prepared to stay the whole session and to take the full curriculum, are admitted. They must be not less than 17 nor more than 30 years of age on 1st September, 1910.

The entrance examination will be held in the first week in September, 1910, at four centres situated one in each province. Each applicant for admission will be notified in due course as to the centre at which he will be required to present himself. No expenses will be allowed in respect of attendance.

The subjects included in the examination will be as follows :—

- (1.) *English*, including dictation and composition.
- (2.) *Arithmetic*, including calculations requiring a thorough knowledge of weights and measures, decimal and vulgar fractions, percentages, and interest.
- (3.) *Mathematics*.—The elements of Mensuration—lengths, areas, volumes; and algebra to simple equations.
- (4.) *Agriculture*.—The questions on this subject are framed with a view to testing knowledge acquired by practical experience of farm work. No text-book is prescribed or recommended. The examination may be oral as well as written.

**FEES.**—The fees for tuition, board, residence, laundry, and ordinary medical attendance during the entire session are :—

For students whose parents or guardians derive their means of living mainly from farming in Ireland, . . . . .	£15
For students other than the foregoing, . . . . .	£30

The fees are payable to the Principal in two instalments, viz., one of £10 (or £30) on entrance and the balance on 1st February. In addition to the instalment of the fee payable on entrance each student must deposit with the Principal a sum of £3 to cover the cost of repairs to clothing, and of books and stationery. The unexpended balance, if any, of this deposit, will be returned at the close of the session.

#### OUTFIT.

Students are required to provide themselves with a proper outfit, particulars of which will be supplied to candidates successful at the entrance examination.



## APPLICATION FOR ADMISSION.

Application must be made on the prescribed form, to be obtained from—  
 THE DEPARTMENT OF AGRICULTURE AND  
 TECHNICAL INSTRUCTION FOR IRELAND,  
 UPPER MERRION STREET,  
 DUBLIN.

Applications will be dealt with in the order of their receipt in the Department's Offices. They should be forwarded not later than the 15th August, 1910.

FORM A. 153 (a).  
 1910.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
 INSTRUCTION FOR IRELAND.

INSTRUCTION IN FRUIT-GROWING AND GENERAL  
 GARDENING.

HORTICULTURAL SCHOOL,

ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

SESSION, 1910-11.

The course provided at this School is suited for men who have already had experience in fruit-growing and general gardening such as can be obtained by working for four or five years under a fully qualified gardener. In addition to the practical work in the gardens, class-room instruction is given to the students to enable them to understand the scientific principles underlying horticulture.

Applicants for admission to the 1910-11 session must be at least twenty years of age on the 1st October, 1910, in good health and of strong constitution, and should have received a fair general education. They will be required to produce evidence that they have been employed regularly at garden work.

Students will be admitted on probation as the result of an examination which will be held at the Albert Agricultural College on the 26th August, 1910. The subjects included in the examination will be :—

- (1.) English—to be tested by dictation and a short letter.
- (2.) Arithmetic—the first four rules, simple and compound ; a knowledge of weights and measures ; and percentages.
- (3.) Practical Fruit-growing and Gardening.

A high standard will not be expected in English or Arithmetic. The examination in practical fruit-growing and gardening will cover the whole range of these subjects.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Successful candidates will be required to enter on their duties on the 11th October, 1910.

The session will close on the 30th September, 1911. Students may be retained at the School beyond that date, if, in the opinion of the Department, they would profit by an extension of the course.

Students are provided with furnished lodging, including coal and light, and receive an allowance of 14s. per week during their first session and of 16s. per week during their second session. They are required to find their own board.

Students of the Horticultural School are subject to the conditions under which the gardeners at the College are employed.

The Department do not undertake to employ or to procure employment

for students at the close of the courses, but the names of those who qualify are sent to County Committees of Agriculture with an intimation that they are eligible for appointment by such Committees, to instructorships under the Department's Scheme of Instruction in Horticulture and Bee-keeping.

Several men who have passed through the School are now employed by County Committees of Agriculture.

Application to attend the examination must be made on the prescribed form, to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

Last date for making application—12th August, 1910.

FORM A. 176 (a.).

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### FARM APPRENTICESHIPS.

AGRICULTURAL STATION, ATHENRY, COUNTY GALWAY.

Young men who intend to become farmers are admitted to the Station for one year, as apprentices, for a course of practical training in several branches of farming.

Apprentices are admitted without payment of any fee. They are required to take part in all the operations of the fields and of the farmyard. They must perform diligently all work assigned to them by the Farm Manager or his Foreman. In winter, class-room instruction is provided in the evenings. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the date of making application, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona-fide* occupation on a farm. Preference will be given to applicants from the province of Connaught. It will also be a recommendation if the applicant has attended a course of instruction held under the Department's Scheme of Winter Agricultural Classes or if he produces a certificate from an Itinerant Instructor in Agriculture that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

Applications for apprenticeships may be made at any period of the year. Apprentices will be admitted in the order of the receipt of their applications in the Department's offices. The Department do not guarantee admission to any applicant. An apprentice will not be retained at the station if he is found unable to perform a fair day's work or to be otherwise unsuitable.

On completion of twelve months at the Station, apprentices whose work has been done with care and diligence and to the satisfaction of the Farm Manager will receive small payments proportioned to the value of their work. In no case will such payment exceed £10.

### OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to applicants on being notified of their admission.

A sum of £1 must be deposited with the Superintendent on entrance to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded on the termination of the apprenticeship.

## APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

FORM A. 176 (b.)  
1910.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

AGRICULTURAL EDUCATION FOR YOUNG MEN.

SESSION 1910-11.

FARM APPRENTICESHIPS.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

Applicants for apprenticeships must not be less than seventeen years of age on the 1st October, 1910, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona fide* occupation on a farm. Preference will be given to applicants from the province of Ulster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It will also be a recommendation if the applicant produces a certificate from the Itinerant Instructor in Agriculture for the County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in Ballyhaise House attached to the Station, where they are under the immediate supervision of the Principal. They must take part as directed in all the work of the farm.

The Session will commence on the 11th October, 1910, and close on the 11th August, 1911. It will be divided into two terms, viz., the Winter Term, from the opening of the Session to the 7th April, 1911; and the Summer Term, from 18th April, 1911, to the close of the Session. There will be an interval at Christmas of about a fortnight, during which the apprentices may return to their homes. Apprentices who are required at home for farm work during the spring and summer may leave the Station at the end of the Winter Term. New apprentices may be admitted for the Summer Term to fill vacancies thus caused.

The course of training will include:—(1) classroom instruction in agricultural subjects which have a direct bearing on farming in Ireland; (2) instruction in subjects of a general educational nature, such as English, arithmetic, book-keeping, &c., which will be useful to the apprentices in their future career as farmers; (3) practical instruction in all the work of the fields and farmyard in connection with the various seasonable operations and with permanent improvements; (4) lessons in veterinary hygiene and woodwork.

The Winter Term will be occupied principally with classroom instruction in agricultural and general subjects. The following subjects will be included in the agricultural course:—

Soils, tillages, manures (natural and artificial), seeds, grasses, weeds,

treatment of pastures, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, elementary chain surveying, and elementary science, explanatory of the principles underlying ordinary farm practice.

The Summer Term will be given almost exclusively to practical training in the outdoor work of the farm. Apprentices who are found unable to do a fair day's work will not be retained at the Station.

Admission as an apprentice is conditional on passing the entrance examination and producing certificates of good health and character.

Applicants who have been pupils at Winter Agricultural Classes will be exempted from the entrance examination provided their attendance and progress at the Agricultural classes have been satisfactory.

#### ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination:—

*Arithmetic*—Simple calculations requiring a knowledge of weights and measures, vulgar and decimal fractions, and percentages.

*English*—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate will be admitted as an apprentice whose general education is too backward to admit of his taking advantage of the classroom instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

#### FEEs.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the inclusive fees for tuition, board, residence, laundry and ordinary medical attendance are proportional to the aggregate tenement valuation of their holdings, as follows:—

	Per Session.
Where the aggregate valuation does not exceed £20.	£3
Exceeds £20 but does not exceed £40, . . . . .	£6
Exceeds £40 but does not exceed £100, . . . . .	£10
Exceeds £100, . . . . .	£15
2. For apprentices not included in the foregoing classes, . . . . .	£20

These fees are in respect of the Winter Term. No additional fees are required from apprentices who are retained for the Summer Term. Apprentices admitted for the Summer Term only pay fees at half the foregoing rates.

Fees must be paid to the Principal on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the Session.

#### FREE PLACES.

A small number of free places provided under the terms of the Anne Hall Bequest are available for applicants from the Counties of Fermanagh and Londonderry. Applications for these places must be addressed in the first instance to the Agricultural Superintendent, Royal Dublin Society, Leinster House, Dublin.

#### OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

## APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's offices.

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FORM A. 134 (a). 1910.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

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SESSION 1910-11.

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CREAMERY COURSE.

Provision has been made at the Agricultural Station, Ballyhaise, for a course of technical instruction for young men who intend to become Creamery Managers.

The course will commence on Tuesday, 11th October, 1910, and will terminate on Friday, 10th March, 1911. There will be an interval of about a fortnight at Christmas.

The following subjects will be included in the course :—Physical Science in relation to Creamery work; Dairy Bacteriology; Dairy Technology; Dairy Engineering; Business Methods.

The course will be particularly suitable for those who have had experience of creamery work.

Students who intend to compete for certificates under the Department's scheme for improvement in the management of creameries will have special facilities for the study of the subjects prescribed for the examination in connection with these certificates which is to be held in March, 1911.

At the close of the technical course at Ballyhaise Agricultural Station, a limited number of the best students will be afforded facilities for learning the practice of Creamery Management during the summer of 1911, in a selected creamery in Ireland. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery.

Applicants for admission to the course must be at least eighteen years of age on the 1st October, 1910.

Admission is conditional on passing the entrance examination, producing certificates of good health and character, and paying the specified fee.

Students are required to take part, as directed by the Principal, in all branches of the outdoor work of the Station which relate to dairying. They must conform strictly to the disciplinary rules in force at the Station.

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ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination :—

*Arithmetic.*—Calculations requiring a knowledge of weights and measures, decimal and vulgar fractions, areas, volumes and percentages.

*English.*—Dictation, Grammar and Composition.

No expenses will be allowed to candidates in connection with their attendance at this examination.

#### FEE.

The fee for tuition, board, residence, laundry and ordinary medical attendance during the course will be £10.

The fee must be paid to the Principal of the Station on entrance, and, in addition, a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the course.

#### OUTFIT.

Students will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

#### APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

Applications will be dealt with in the order of their receipt in the Department's offices. They should be forwarded as soon as possible, and not later than 1st September, 1910.

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FORM A. 176 (c.).

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### AGRICULTURAL EDUCATION FOR YOUNG MEN.

SESSION 1910-11.

#### FARM APPRENTICESHIPS.

#### AGRICULTURAL STATION, CLONAKILTY, COUNTY CORK.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

The farm is managed by an experienced agriculturist, under whose direction the apprentices are required to take part in all the work of the fields and of the farmyard, whether in connection with seasonable operations or permanent improvements. In the class-room attention is given, in the evenings and at other times when outdoor work is not pressing, to English, Arithmetic (including Surveying), Book-keeping and Technical Agriculture. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices, and to be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1910, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona-fide* occupation on a farm. Preference will be given to applicants from the province of Munster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It will also be a recommendation if the applicant produces a certificate from the Itinerant Instructor in Agriculture for the

County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in the buildings attached to the station, where they are in the charge of a house master and matron.

The Session will commence on the 11th October, 1910, and will terminate on the 11th August, 1911. There will be two intervals, each of about a fortnight, during which the apprentices may return to their homes—one at Christmas and the other at Easter.

Admission as an apprentice is conditional on passing the entrance examination, producing certificates of good health and character and paying the required fee according to the scale indicated overleaf.

Applicants who have been pupils at Winter Agricultural Classes will be exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

#### ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination:—

*Arithmetic*.—Simple calculations requiring a knowledge of weights and measures.

*English*.—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National School.

No candidate will be admitted whose general education is insufficient to enable him to profit by the class-room instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

#### FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the fees are proportional to the aggregate tenement valuation of their holdings, as follows:—

	<i>Per Session.</i>
Where the aggregate valuation does not exceed £20, . . .	£3
Exceeds £20 but does not exceed £40, . . .	£6
Exceeds £40 but does not exceed £100, . . .	£10
Exceeds £100, . . .	£15

2. For apprentices not included in the foregoing classes, . . . £20

Apprentices will be notified of the fees payable by them. Fees must be paid to the Superintendent on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the session.

#### OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

#### APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form, to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's offices. They should be forwarded not later than 15th August, 1910.

## AGRICULTURAL COLLEGE, MOUNT BELLEW.

## SESSION 1910-11.

The College stands in a picturesque and healthy position, in the midst of the charming woodland scenery of the Mount Bellew Demesne. It is under the management of the Franciscan Brothers.

New Laboratories, with all modern requirements, and a model farmyard have been lately built and equipped by the Department of Agriculture.

The farms, gardens, and laboratories afford ample facilities for a thorough course in Technical Agriculture, and also in those subjects set out below. Students are required to take part in all farm operations in the field, farmyard and dairy.

The Session for the year 1910-11 will commence on 5th September, 1910, and end on 20th June, 1911. Applicants must be 16 years of age, or over.

The course of instruction at the College includes the following subjects :—

- 1.—Practical Farming.—Every Student is encouraged to take part in all farm operations, and is taught to follow the working of the system of Farming adopted, with interest and profit. Each Student keeps for himself a set of farm books and notes all outlays and incomes for Farm Operations, Live Stock and Dairy, etc., as if the farm were his own. The final balancing at end of year tells him exactly how the farm paid, what paid best and where losses were sustained, etc.
- 2.—A course of Physics, Chemistry, and Biology explanatory of the natural processes which increase or diminish the returns from farm operations.
- 3.—Farm Calculations, Surveying of Land.—Values of Manures and Feeding Stuffs.
- 4.—Study of Seeds, Grasses, Woods and Pastures.
- 5.—Use of Natural and Artificial Manures.
- 6.—Management of Live Stock. Winter Dairying.
- 7.—Veterinary Hygiene.
- 8.—Poultry-Keeping.
- 9.—Fruit Growing.
- 10.—Bee-Keeping.
- 11.—Woodwork.
- 12.—Book-keeping.

## TERMS.

Fifty Scholarships of £10 each will be awarded this year on the result of a qualifying Entrance Examination in the following subjects :—(a) English Composition (short essay or letter); (b) Arithmetic, tested by simple questions; (c) some knowledge of practical Agriculture. N.B.—The object of this examination is mainly to find out if candidates for scholarships have sufficient ability to profit by the programme of work outlined in Syllabus.

Each Scholarship Student will be required to give an undertaking that it is his intention to become a farmer in Ireland, or that he has a good prospect of obtaining occupation on a farm in Ireland.

The Pension for those awarded Scholarships will be £15, payable in advance.

For all others the pension will be £25 payable in two instalments, £15 on day of entrance, and £10 on the first of February. The fee for non-resident students shall be £3 per year, payable in advance.

Students are under the supervision of the Brothers at all times—on the farm, in the laboratories, dormitories, and recreations.



DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

THE MUNSTER INSTITUTE, CORK.

The classes at the Institute are open to female students only.

The course of training includes :—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, calves and pigs ; in the keeping of small gardens, and in the manipulation and caring of bees.
- III. Instruction in poultry-keeping. Breeds ; their suitability for different purposes and different localities ; housing, feeding and management ; grading and packing of eggs ; hatching and rearing of chickens ; fattening, killing, plucking, trussing and preparation for market.
- IV. Instruction in domestic work, embracing plain cookery, plain needlework, laundry work, and home nursing.

The fee for tuition, board and lodging during one term is £3 3s., and is payable to the Superintendent of the Institute on entrance.

Four terms, each of about eleven weeks' duration, and commencing respectively, in January, March, July and October, are held in each year.

Intending students must be at least seventeen years of age on the date of their admission to the Institute. They are required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

Students are eligible for admission to a second consecutive term, provided they attain the required standard at the examination at the conclusion of their first term.

Students who have attended during two terms, and who are desirous of qualifying for the position of Itinerant Instructor in butter-making or poultry keeping under a County Committee of Agriculture and Technical Instruction or of Teacher in a School of Rural Domestic Economy for girls, are admitted to a third term on attaining the required standard at the second terminal examination and satisfying the Department's examiner as to their ability to impart instruction. If their progress during the third term is satisfactory they are re-admitted to enable them to complete their training. Attendance at the Institute during five or six terms is necessary to qualify students for admission to the examinations for Instructorships and Teacherships.

Girls who desire to become dairymaids in creameries, and who have attended two terms either at the Munster Institute or at a School of Rural Domestic Economy, will, on attaining the required standard at their second terminal examination be admitted to the third term course at the Institute. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks.

The Department do not undertake to employ or to find employment for students on completion of their training.

A limited number of free places and half-free places are awarded to the students who display special merit at the terminal examination of the first term to enable them to avail of a second term entirely or partially free of expense. A few similar places are also offered to students who have attended two terms at the Institute.

The students are at all times under the supervision of an experienced matron.

Applications for admission must be made on the prescribed form which can be obtained from—

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN.

FORM A 255 (a).

# DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

## THE ULSTER DAIRY SCHOOL, COOKSTOWN, CO. TYRONE.

The School is situated on an extensive tillage and dairy farm about three miles from Cookstown Railway Station. It is provided with the most modern equipment for the teaching of the several subjects included in the programme.

The classes are open to female students only.

The course of training includes :—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, and in farm-yard lore.
- III. Instruction in poultry-keeping. Breeds; their suitability for different purposes and different localities; housing, feeding and management; grading and packing of eggs; hatching and rearing of chickens by natural and by artificial methods; fattening, killing, plucking, trussing and preparation for market.
- IV. Instruction in domestic work, embracing plain cookery, plain needle-work, laundry work and home nursing.

The fee for tuition, board and lodging during one term is £3 3s., and is payable to the Superintendent of the School on entrance.

Four terms, each of about eleven weeks' duration, and commencing respectively in January, March, July, and October, are held in each year.

Intending students must be at least seventeen years of age on the date of their admission to the School. They are required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

Students are eligible for admission to a second consecutive term, provided they attain the required standard at the examination at the conclusion of their first term.

Students who have attended during two terms, and who are desirous of qualifying for the position of Itinerant Instructor in butter-making or poultry-keeping under a County Committee of Agriculture or of Teacher in a School of Rural Domestic Economy for girls may be admitted to a third term provided they attain the required standard at the second

terminal examination and satisfy the Department's examiner as to their ability to impart instruction. If their progress during the third term is satisfactory they may be re-admitted to a fourth, fifth, or even a sixth term at the option of the Department to enable them to complete their training.

Girls who desire to become dairymaids in creameries, and who have attended two terms either at the Ulster Dairy School or at a School of Rural Domestic Economy, will, on attaining the required standard at their second terminal examination be admitted to the third term course at the Ulster Dairy School. On completion of this course a limited number of these pupils will be afforded facilities for learning the practical work of a dairymaid in selected creameries in Ireland. In selecting the pupils to whom these facilities will be offered, regard will be had to (1) their knowledge of dairying as evidenced by their answering at the terminal examination at the conclusion of their course of instruction as third-term students, and (2) their physical suitability for the work of a dairymaid in a creamery. Each selected pupil will receive a maintenance allowance at the rate of ten shillings per week in addition to free instruction at a creamery for a period of twenty weeks.

The Department do not undertake to employ or to find employment for students on completion of their training at the School.

The students are at all times under the supervision of a responsible matron.

Applications for admission must be made on the prescribed form, which can be obtained from—

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN.

FORM A 135 (e).

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY, LOUGHGLYNN,  
CO. ROSCOMMON.

This school has been established in order to provide the women and girls of the neighbourhood with such practical training as will enable them to increase the comfort of their homes and improve generally the conditions under which they live. The particular object of the Department in promoting this type of instruction in rural districts in Ireland is to inculcate respect and affection for the home and the countryside, and thereby counteract the tendency to despise farm work and abandon rural life. The training aims at making efficient housewives. It does not aim at the preparation of girls for domestic service or for the factory or the shop.

The course of instruction comprises:—

*Dairying*—Including the making of cheese as well as butter; and the caring and feeding of cows and calves.

*Poultry-keeping*—The rearing and management of hens, ducks, turkeys, and geese.

*Pig-rearing*—The feeding and general management of pigs.

*Gardening*—The cultivation of such vegetables, fruits, and flowers as may be grown in the cottage garden.

*Bee-keeping*.

*Sewing, Knitting, and Mending*—Including the making and repairing of garments of every kind worn in the district.

*Washing and Ironing*.

*Cooking*—The preparation, with inexpensive and simple utensils, of those dishes for which the materials are furnished by the products of the farm and the garden. Open hearths are used.

*The Cleaning* and decoration of the home.

*Home Industries* which can be carried on in time not required for the farm or the household, such as lace-making, embroidery, carpet weaving, the making of artificial flowers, &c.

The School is open to all who wish to enter, without restriction as to religious denomination. No fees are payable; the only conditions which the pupils must fulfil are that they should be more than fourteen years of age and reside sufficiently near the School to permit of their returning daily to their homes.

In order to give the lessons direct practical application to the home life of the people, the pupils are required to bring with them to the school so far as may be practicable, the materials needed for their work—the cream or milk for dairy practice; the poultry to be killed or dressed; the materials for the dishes to be cooked; the cloth for new garments; the clothing to be repaired, washed or ironed. The pupils take home with them in the evening the products of their day's labour, which serve as object-lessons to those who cannot be present at the classes.

Housewives and others in the neighbourhood who are not in a position to attend the classes daily, are at liberty to avail themselves of the instruction in any subject, and to come to the school for advice whenever they desire it in connection with their home work; and the teachers are prepared to visit the homes of persons who desire their guidance in the difficulties of household management.

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FORM A 135 (d).

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### SCHOOL OF RURAL DOMESTIC ECONOMY.

ST. MARY'S CONVENT OF MERCY, PORTUMNA, CO. GALWAY.

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The school is open to female pupils over sixteen years of age without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work, and Needle-work.

The school year extends from the beginning of October to the end of August, and is divided into two sessions, which begin, respectively, in October and in March.

Intending pupils are required to produce certificates of good health and character. They will not be admitted unless they have received sufficient general education to enable them to follow the course.

#### RESIDENT PUPILS.

A number of places for resident pupils are provided by the Department.

The fee for tuition, board and lodging during one session, covering a period of about twenty-four weeks, is £3 3s., and is payable to the Manager on entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive session on payment of the above-mentioned fee.

Application for admission must be made on the prescribed form which can be obtained from

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.  
DAY PUPILS.

Applications for the admission of day pupils should be made to the Manager at the School. No fees are payable by day pupils.

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FORM A 135 (b).

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY.  
CONVENT OF ST. LOUIS, RAMSGRANGE, COUNTY WEXFORD.

The school is open to female students over sixteen years of age without restriction as to religious denomination.

The course of training is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work and Needle-work. Instruction in English, Arithmetic, Book-keeping, Elementary Science, and Chemistry is also provided.

The school year extends from September to August, and is divided into two sessions, which begin, respectively, in September and in March.

Thirty places for resident students are provided by the Department. The fee for tuition, board and lodging during one session, payable by the holders of these places, is £3, and applicants are required, before admission to the school, to produce certificates of good health and character, and to pass an examination in the elements of English and Arithmetic. The fee payable by resident pupils other than holders of these places is £10 per session. Day pupils are admitted at a fee of £1 per session. Fees must be paid to the Manager on Entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive Session.

Application for admission as a resident student must be made on the prescribed form, which can be obtained from

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

Applications for the admission of day pupils should be made to the Manager at the school.

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FORM A. 135 (f).

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY.  
KILLESHANDRA VILLAGE INSTITUTE, COUNTY CAVAN.

The school is open to female pupils over fifteen years of age, without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform

efficiently the work of rural life. It includes Household Management, Cookery, Laundry-work, and Needle-work. Attention is also given to Dairy-work and Poultry-keeping.

Intending pupils must undertake to attend regularly and punctually. They may be required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

The school year is divided into two sessions which begin, respectively, in August and February.

#### RESIDENT PUPILS.

Arrangements have been made which admit of five pupils being boarded and lodged at the school. The girls to whom residential places are awarded are selected by the Manager, subject to the approval of the Department.

Pupils, whose conduct and progress during their first session are regarded by the Department as satisfactory, are eligible for admission to a second consecutive session.

#### DAY PUPILS.

Classes for day pupils are held each week day (Saturday excepted), from 11 a.m. to 5 p.m.

In the case of persons, such as mothers of families, who are too much occupied with their household work to attend regularly throughout the session, arrangements will be made to admit of their attending any one course or separate lessons, without fee.

#### FEES.

The fees are proportioned to the valuation of the holdings of the pupils' parents or guardians, as follows:—

##### A. FOR DAY PUPILS.

Where the valuation does not exceed £20 . . . . .	3s. 6d. per session.
Where the valuation exceeds £20 but does not exceed £40 . . . . .	5s. 0d. „ „
Where the valuation exceeds £40 . . . . .	7s. 6d. „ „

##### B. FOR RESIDENT PUPILS.

Where the valuation does not exceed £20 . . . . .	£2 „ „
Where the valuation exceeds £20, but does not exceed £40 . . . . .	£3 „ „
Where the valuation exceeds £40 . . . . .	£4 „ „

Applications for admission should be made to

THE DOMESTIC ECONOMY INSTRUCTRESS,  
THE INSTITUTE,  
KILLESHANDRA.

FORM A. 181 (a).  
1910.

#### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

##### FORESTRY INSTRUCTION.

A limited number of apprenticeships in Forestry will be awarded on the result of an examination which will be held at the Royal College of Science, Dublin, on the 8th September, 1910. The subjects included in this examination will be—

English—to be tested by dictation and a short letter.

Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures, proportion, and percentages.

A high standard will not be expected.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Applicants for apprenticeships must be not less than eighteen years of age and not more than twenty-five years on the 1st October, 1910. They should be in good health, and of strong constitution, and have received a fair general education. Preference will be given to those applicants who have had experience in working in woods.

The selected applicants will be required to work under the directions of a skilled foreman, for at least one year, in one of the woods belonging to the Department. During this period apprentices will be given facilities for improving their general education. Apprentices who acquit themselves in such a manner as to lead the Department to believe that they are likely to make suitable foresters may, at the end of this period, be selected to attend a further course of instruction at Avondale Forestry Station, Rathdrum. The duration of the course at Avondale may extend from one to two years, and in addition to class-room instruction apprentices will be required to take part in the work of the woods attached to the station or in such of the woods belonging to the Department as may be decided on from time to time.

Successful candidates will be required to enter on their duties on the 4th October, 1910.

Each apprentice will receive during the first year an allowance at the rate of 14s. per week, with furnished lodging. When in receipt of this allowance the apprentices will be required to find their own board. Such apprentices as are selected to attend at Avondale Station for a further period of training will be provided with free board, lodging and education, and receive allowances at the rate of 5s. per week.

Apprentices must undertake to conform with the rules and regulations made from time to time in connection with their work in the Department's woods and at the Forestry station.

The engagement between apprentices and the Department may be determined at any time by one week's notice on either side.

The Department do not undertake to employ or to procure employment for apprentices on completion of their training.

Applications for apprenticeships must be made on the prescribed forms to be obtained from

THE DEPARTMENT OF AGRICULTURE  
AND TECHNICAL INSTRUCTION,  
UPPER MERRION STREET,  
DUBLIN.

Last date for making application—25th August, 1910.

FORM A, 169 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.  
FORESTRY.

NOTICE TO OWNERS OF WOODS AND PERSONS PROPOSING  
TO FORM PLANTATIONS.

The Department are prepared to afford expert assistance to landowners and others who may require advice on such matters as the selection of sites for plantations, suitability of soil, choice of trees, treatment and valuation

of existing woods, draining and fencing of woodlands, valuation of timber, growing of osiers, &c.

The Department's Forestry Expert will, so far as time will permit, visit existing woods or lands which it is proposed to plant. In such cases a fee of £2, to cover part of the Expert's expenses, will be charged when the visit does not entail an absence from headquarters of more than three days. For visits extending over a longer period a special fee may be arranged, but the Department do not guarantee that more than one complete day will be allowed for each visit. If a visit from the expert is not required, advice will be given by letter free of charge.

The Department are also prepared to facilitate the planting of small areas by placing at the disposal of persons who propose to form plantations the services of any working foresters who can be spared from the Department's woods for a few weeks in the planting season. The wages and travelling expenses of these foresters must be paid by the persons by whom they are employed.

The undermentioned leaflets on forestry subjects have been issued by the Department, and will be supplied to applicants free of charge:—

- No. 65.—Forestry.—The Planting of Waste Lands.
- No. 66.       "     The Proper Method of Planting Forest Trees.
- No. 67.       "     Trees for Poles and Timber.
- No. 68.       "     Trees for Shelter and Ornament.
- No. 70.       "     Planting, Management, and Preservation of Shelter Belt and Hedgerow Timber.
- No. 71.       "     The Management of Plantations.
- No. 72.       "     Felling and Selling Timber.
- No. 73.       "     The Planting and Management of Hedges.
- No. 83.       "     Cultivation of Osiers.
- No. 94.       "     Cost of Forest Planting.

Applications for visits from the Expert or for the services of skilled planters should be made on the forms provided for the purpose, and will be attended to as far as possible in order of their receipt in the Department's offices.

Letters, which need not be stamped, should be addressed to

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE  
AND TECHNICAL INSTRUCTION,  
DUBLIN.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

#### AGRICULTURAL SCHEMES, 1910-11.

No. 15109-10.

SIR,

In forwarding, for the information of your Committee, the accompanying copies of the Agricultural Schemes for 1910-11, the Department desire to direct special attention to the alterations which have been made in the schemes, as well as to some of the more important regulations.

#### Scheme No. 1.—Horses.

It will be observed that the 31st August, 1910, is fixed as the last date for receiving applications for the registration of stallions *without fee*. Applications received between 1st and 30th September, 1910, will not be accepted unless accompanied by a fee of £1. An application received between 30th September, and 30th November, 1910, must be accompanied by a fee of £5 (clause 13).



Scheme No. 2.—*Cattle*.—No change.Scheme No. 3.—*Swine*.

Under clause 13 the Committee are given discretion to fix the value of a premium within the limits specified therein.

Owners who have complied with all the conditions of the scheme may apply for payment of the premium on or after 1st August.

Scheme No. 6.—*Subsidies to Agricultural, etc., Societies*.

The Department are pleased to note a considerable improvement in the cases of many Show Societies in the matter of compliance with the regulations of this scheme. In some counties, however, but little progress has been made in this direction, and the attention of County Committees is therefore particularly directed to the necessity of forwarding to these offices all documents referred to in clause 3 by the prescribed date. It should be borne in mind that unless the Department are in possession of the documents in question by 1st March, 1911, at latest, they will not be in a position to give sufficient time to the consideration of applications for grants, and thus delay must necessarily take place in notifying the Committee of the Department's decisions.

Scheme No. 7.—*Prizes for Cottages and Small Farms*.

Clause 5 provides that it shall be the duty of the County Committee to examine the entry forms and to satisfy themselves, as far as practicable, as to the eligibility of each entrant before the list of competitors is supplied to the judge.

Scheme No. 10.—*Winter Agricultural Classes*.

No applicant shall be permitted to join a class after the lapse of two weeks, from the date of the first meeting of the class (clause 4 (6)).

Attention is directed to the fact that meat meals may not be provided for students.

The regulations as to travelling allowances to students have been revised, and, accordingly, students who reside beyond a radius of three statute miles from the class centre, may, at the end of the course, be allowed the cost of third-class railway tickets, or one penny for each mile by which the double journey by road between their homes and the class centres exceeds six miles (clause 5).

Students of Winter Agricultural Classes whose attendance and progress thereof have been satisfactory will receive special preferences in connection with the award of agricultural apprenticeships at the Department's Agricultural Stations. Such students will be exempted from the entrance examination prescribed for other applicants for these apprenticeships.

Scheme No. 11.—*Poultry Keeping*.

As intimated in the communication (No. 15645-09) addressed to you last year from these offices, Houdan fowl will not be recognised in any future year.

In no case shall lectures be given after the end of the hatching season (clause 7). After stations have been reported by the Instructor to be fully stocked, at least two complete inspections of geese and turkey stations in the County should be made before 31st May (clause 9), and no birds should be disposed of until after the latter date (clause 10(7)).

No gander shall be retained for more than six years at any one station. A gander which has been for six years at one station must be replaced by a bird unrelated to the stock at the station (clause 13 (2)).

Scheme No. 12.—*Tutorial and Practical Classes in Poultry Keeping*.

It is provided that classes shall be held at each selected centre for at least two, but not more than four, weeks; and that eighteen pupils may be admitted to any class (clause 2).

Scheme No. 14.—*Horticulture and Bee-Keeping.*

With regard to demonstration plots, it is not considered desirable to continue the grant to any plot for more than three years. The County Committee are required to forward to the Department on the prescribed form, not later than 1st January, a list of demonstration plots selected for the year, accompanied, in the case of new plots, by a detailed report from the Instructor (clause 10 (c)).

The Department have drafted a form of undertaking which must be signed by the owners of new demonstration plots. When the new plots have been selected by the Committee and approved by the Department, a sufficient number of copies of this form will be supplied to the Committee.

## EQUIPMENT.

It will be observed that a regulation has been inserted in each scheme imposing on the Secretary of the County Committee the duty of keeping an inventory and being responsible for the custody of all equipment provided for the purposes of each scheme.

A supply of the schemes will be issued to you on receipt of your application, which should be made on the accompanying form. It is particularly requested that you will not ask for more copies than can be profitably used during the year.

I am, Sir,

Your obedient Servant,

T. P. GILL,

*Secretary.*

The Secretary of each

County Committee of Agriculture.

## SCHEME No. 1.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS  
OF HORSES.  
1911.

## GENERAL REGULATIONS.

1. The main objects of this scheme are to encourage the improvement of Horse Breeding in Ireland by inducing stallion owners to keep suitable and sound sires of a high degree of excellence, and by inducing farmers to retain their best young mares for breeding purposes. When arranging the details of this scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of horses in a county will depend on—(1) the amount provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (6) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, all details of schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing:

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that Committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department, but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely for nomination of mares.

9. In the event of there not being a sufficient number of registered stallions in any county for the purposes of this scheme, the Department may provide for such county, under certain conditions to be prescribed by them, by assisting approved applicants, whether individuals or associations, to buy suitable stallions under the Department's scheme of loans for the purchase of stallions.

#### REGISTRATION OF STALLIONS.

10. Thoroughbred stallions, calculated to produce weight-carrying hunters and high-class harness horses, may be registered for any county in Ireland.

Irish Draught and Half-bred stallions may be registered for any county in Ireland.

All Clydesdale and Shire stallions registered in 1910 may again be offered for registration under this scheme for the particular districts in which they were registered during that year, but no other stallions of these breeds will be accepted for registration in 1911 except for the Province of Ulster, the counties of Dublin and Louth, and the district comprised within a radius of ten miles of the city of Cork.

11. The Department will publish a register of Thoroughbred, Irish Draught, Half-bred, Clydesdale, and Shire Sires approved for service under this scheme. Owners of suitable stallions are invited to apply to have their horses placed on the Register, subject to the provisions of this scheme. A stallion to be entitled to a subsidy in the form of nominations, or otherwise, must be registered or accepted for registration in the Department's Register of Stallions for the year 1911.

Copies of the Register, when published, may be had free of charge on application to the Department.

12. (1.) Owners offering their stallions under this scheme must, if required, submit them to inspection and veterinary examination by the Department. Notice of the arrangements as to place and method of inspection will be given.

(2.) Owners of stallions failing to present their animals for inspection on the dates and at the places selected will be liable to have their applications cancelled by the Department.

(3.) Thoroughbred stallions, to qualify for registration, must be entered in Weatherhy's Stud Book, or, if Clydesdale or Shire, be entered in the stud book of the respective breed. If required, the stallion owner or (if the stallion is being purchased with a view to registration in Ireland) the vendor must produce a certificate from the keeper of the stud book to the effect that the stallion offered for registration is entered in the stud book or will duly appear in the next volume.

(4.) No application will be considered in which every particular required in the form of application is not supplied.

(5.) No application will be considered in respect of a stallion foaled in 1909.

(6.) The owner of a stallion accepted under this scheme must agree not to permit that stallion to serve more than fifty nominated mares, which are entitled to its services. This regulation is subject, however, to the conditions stated in Clauses 21 (14), 22 (1), and 30.

(7.) Stallions approved under this scheme will be accepted for particular districts only, and shall not, without the written consent of the Department, be removed to other districts. If a stallion is removed without such consent to a district for which it was not accepted, the name of such stallion shall be removed from the Register, and the owner shall forfeit all claim to any monies which may be payable to him under this scheme.

13. Forms of application for the purposes of this scheme may be had from the Department.

One of these forms, accurately filled up in every particular and signed by the owner or his agent, must be lodged in or sent by post so as to reach the offices of the Department not later than the 31st August, 1910.

An application received between 1st and 30th September, 1910, will not be accepted unless accompanied by a fee of £1. An application received between 30th September and the 30th November, 1910, must be accompanied by a fee of £5.

Applications for registration in respect of stallions already at stud in Ireland will not be accepted after the 30th November, 1910.

14. (1.) Applications in respect of stallions imported into Ireland after the 31st August, 1910, will be considered without fee if received on any date up to the 28th February, 1911. Similar applications in regard to stallions in Ireland which have not previously been used for stud purposes will be considered up to 28th February, 1911, provided they are each accompanied by a fee of £5. The entry of such stallions in the published Register for 1911 cannot, however, be guaranteed, but the owners of such stallions will be accorded all the privileges enjoyed by the owners of stallions appearing in the printed Register.

(2.) A person in Ireland intending to import a stallion or to buy a stallion already located in Ireland is advised not to complete the purchase until he has received formal notice in writing from the Department that the stallion in question will be accepted under this scheme for a particular district. [See clause 18.]

(3.) The Department will, as far as practicable, supply the services of their Inspectors free of charge to persons in Ireland intending to purchase and import suitable stallions for districts in which there is not a sufficient number of approved stallions for the purposes of this scheme; the stallion, however, must have been seen and provisionally approved by the intending purchaser.

(4.) The vendor of a Pure-bred sire must, if required, submit a certificate from the Secretary of the Stud Book to the effect that the animal is entered in the stud book, or will duly appear in the next volume.

15. Stallions may be inspected for their general merit and fitness for the purposes of the scheme. Such inspection shall be carried out by one or more Inspectors, appointed by the Department. If the stallion has

been to stud, evidence of his fruitfulness, and, where practicable, of the character of his stock, must be produced, if required. Inspection for general fitness, when deemed necessary, shall, as far as possible, precede veterinary examination.

16. (1.) The veterinary examination shall be carried out by one or more qualified Veterinary Surgeons, appointed by the Department.

(2.) No stallion shall be rejected as unsound unless suffering from one of the following diseases:—Cataract, Roaring, Whistling, Ringbone, Sidebone, Unsound Feet, Spavin, Curb.

17. The inspection for general merit and fitness and the veterinary examination of stallions may be dispensed with in cases where evidence of suitability and soundness have been sufficiently established to satisfy the Department.

The Department, however, shall have the right to inspect an accepted stallion at any time.

18. The Department cannot undertake to disclose their reasons for the non-acceptance of any animal, but with the exceptions hereinafter mentioned the owner of any stallion in Ireland not accepted may have his case reconsidered by one or more referees appointed by the Department. Every notice of appeal must be accompanied by a fee of £5, which will be returned in the event of the appeal being upheld. Notice of appeal must be given in writing within ten days from the date of the letter of rejection.

This privilege shall not extend to cases in which stallions have been rejected on appeal in a previous year or to cases in which stallions are offered under clause 14 (1 and 2).

19. The Department reserve to themselves the right, without assigning any reason, or without inspection or veterinary examination, to decline to place or retain on the Register any stallion for the purpose of this scheme. No right of appeal shall lie in the case of stallions rejected under this clause.

20. The owner of a stallion who makes, or promises to make a gift to the owner of a nominated mare of portion of the service fee, allows a nominated mare to be served by a stallion other than that originally selected by the owner of the mare, or who is detected in any other fraudulent practice in connection with this scheme shall have his horse struck off the Department's Register, and shall be debarred from obtaining any future benefit under the Department's schemes. He shall also forfeit any claim in respect of monies due to him under this scheme.

#### NOMINATIONS OF MARES.

21. (1.) Upon consecutive dates, and at places to be first approved by the Department, exhibitions of farmers' mares shall be held in each county for the purpose of issuing nominations.

(2.) Wherever practicable, and in order to avoid unnecessary expense, two exhibitions should be held on one day at two centres, i.e., one in the morning and one in the afternoon.

(3.) The County Committee shall give due notice to farmers in the county of the dates, &c., fixed for such exhibitions by means of posters, advertisements in the local newspapers, circulars, or such other method as may be deemed by the Committee to be the most effective and economical for the purpose.

(4.) The Secretary must send to the Department two copies of each such poster, advertisement, circular or other notice as soon as issued.

(5.) The Secretary shall receive entries for each exhibition on forms to be obtained from him. Each form must be signed by the owner of the mare, who must certify on the form that all the particulars given thereon are correct. Further, if required, this certificate must be attested by a magistrate.

(6.) Mares to receive nominations must be the *bona-fide* property of a farmer resident in the county (with the exception of the case provided for in No. 9 of this clause).

(7.) In order to secure the second of the main objects stated in Clause 1. of this scheme, preference will be given to the best young mares under six years of age.

(8.) Each mare must be the *bona-fide* property of a farmer, the tenement valuation in aggregate of whose holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Subject to such conditions as may be prescribed by the Department, herds' mares will be eligible to compete for nominations.

(9.) A farmer whose holding extends into more than one county may apply for a nomination in any one of the counties in which he holds land provided the aggregate tenement valuation of the holdings, wherever situated, and for which he is rated, does not exceed the limit fixed under (8) for the county in which he proposes to compete.

(10.) The mares to receive nominations shall be selected by a judge or judges appointed by the Department, and they must be passed free from any hereditary disease by a Veterinary Surgeon appointed for that purpose by the Department. The decisions of the judge and of the Veterinary Surgeon as to the suitability and soundness respectively of mares for nominations will be conclusive.

(11.) No farmer shall receive more than one nomination, unless the number of mares selected and reserved be insufficient for the granting of the full number of nominations allotted to the county, in which case a second nomination may be awarded.

(12.) At each local exhibition all eligible mares not selected for nominations shall be placed on a reserved list in strict order of merit.

(13.) Owners of registered stallions have a right to require hobbles to be used.

(14.) Owners of registered stallions may refuse service to mares suffering from a contagious disease; but the reasons for such refusal must be intimated immediately to the Department and to the County Committee by the stallion owner. Mares can be served only at their owners' risk.

22. The County Committee, with the approval of the Department, may—

(1.) subject to the provisions of Clause 10, restrict nominations to any one or more of the breeds of stallions on the Register;

(2.) refuse a nomination for any mare, without assigning any reason therefor;

(3.) for the purpose of identification, brand all mares selected for nominations;

(4.) require the owner of each nominated mare to deposit a sum not exceeding £2, such deposit to be refunded if the mare is served by the selected stallion or to be forfeited to the Committee in the event of the owner failing without sufficient cause to have the mare served by such stallion;

(5.) make regulations which will render a farmer who, without sufficient cause, fails to send his nominated mare to the selected stallion, ineligible to enter mares for nominations in subsequent years; and

(6.) make regulations in regard to any other matter under this scheme. All regulations so made shall take effect in the county as if incorporated in this scheme.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. (1.) The lists of owners of mares selected for nomination and of mares reserved must be submitted to the Department by the Secretary, within six days after the date of the last exhibition in the county, on the form supplied for the purpose.

(2.) The dockets for the selection of stallions and the service tickets will be supplied to the Secretary, when such form, complete, has been received by the Department. The selection dockets and service tickets shall then be filled in by the Secretary, who shall return them to the Department for the necessary check and authorisation for issue.

(3.) The Secretary, before issuing the selection docket, shall date it.  
 (4.) The service ticket must not be issued by the Secretary until the owner of the mare has returned to him the selection docket with the name of the selected stallion duly entered thereon by the said owner.

(5.) Not later than the 10th day of August, 1911, the Secretary shall forward to the Department, on the form provided for the purpose, particulars regarding the distribution of such tickets.

25. (1.) A farmer receiving a nomination must select one of the approved stallions in Ireland of the breed named by the County Committee under Clause 22 (1), provided the service list of the stallion selected is not already full. See Clause 26 (2).

(2.) Such farmer must insert on the selection docket the name of the stallion by which he wishes to have his mare served, and must return said docket so as to reach the Secretary not later than sixteen days from the date of issue of such docket.

He must also transmit with the docket the amount of the deposit, if any, fixed by the County Committee under Clause 22 (4.).

26. In any one of the following cases the nomination shall be forfeited and shall lapse :—

- (1.) If the farmer to whom a nomination is issued should fail to select a stallion within the sixteen day limit.
- (2.) If the owner of the mare is also the owner of the stallion selected.
- (3.) If the farmer to whom a nomination is issued should permit his nominated mare to be served by a stallion other than that originally selected.
- (4.) If the nominated mare should die before first service.
- (5.) If the nominated mare should be sold before the date of the first service.
- (6.) If the nomination has been obtained through any misrepresentation.

The Secretary shall cancel and return to the Department the numbered tickets for all such lapsed nominations, and may issue to the owners of mares strictly in the order in which they appear on the reserve list new tickets to be obtained from the Department in lieu of such cancelled tickets.

27. A nomination is not transferable, and is available only for the selected mare.

28. The service season shall be reckoned to begin on the 1st day of March, 1911, and to terminate on the 31st day of July, 1911.

29. The value of the nomination fee shall be uniform for the county, but may vary with the breed of stallions selected, and shall be not less than £2, or more than £3.

30. (1.) When the service fee exceeds the value of the nomination, the excess shall be paid by the owner of the mare to the owner of the stallion at the time of the first service, or at such other time as may be agreed upon between them.

(2.) In addition, the farmer shall pay a groom's fee of 2s. 6d. for each nominated mare.

31. (1.) Not earlier than the 1st August, 1911, and not later than the 1st October, 1911, the owners of stallions shall forward to the Secretary the selection of dockets and the service tickets for the services effected by their sires, accompanied by a statutory declaration to the effect that the conditions of service have been duly complied with.

(2.) The form of declaration required under this clause may be had on application to the Secretary.

(3.) The Secretary shall examine and check all these documents, and when certified by him as correct shall forward them to the Department.

(4.) Payment of nomination fees to owners of stallions shall not be made until the Department have been satisfied as to the fulfilment of the conditions of this scheme, and have signified in writing their approval of each particular payment.

32. No payment shall be made in any of the following cases—

- (1.) Where any erasure or alteration appears on either the selection docket or the service ticket.
- (2.) Where both the selection docket and the service ticket bearing corresponding numbers are not produced.
- (3.) Where a nomination issued in respect of a particular nominated mare is used for another mare, whether nominated or not.
- (4.) Where service has been effected by a stallion other than that originally selected.
- (5.) Where an owner who received a nomination failed to send his mare for service.
- (6.) Where the owner of a stallion fails to lodge by 1st October, 1911, with the Secretary, in the manner provided in Clause 31, his claim for payment of nomination fees.

33. The owner of a mare who accepts, or agrees to accept, from a stallion owner, portion of the service fee, changes nominations, substitutes mares, enters one or more mares for nomination in the name of another person, or causes or permits his mare to be so entered, or any person detected in any other fraudulent practice in connection with these regulations shall, in addition to any penalty to which he may be liable by law, be debarred from obtaining any future benefits under the Department's schemes.

34. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

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#### Scheme No. 2.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,

### SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS OF CATTLE.

1911.

1. The main objects of this scheme are to improve the dairy and store cattle in Ireland by encouraging the breeding or introduction of pure bred bulls or registered dairy bulls of a high degree of excellence and by inducing associations of farmers or persons of means to purchase high class bulls for the use of small farmers. When arranging the details of the scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of cattle in a county will depend on—(1) the amount of money provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (6) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply, or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.



4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, details of all schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department; but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely in providing premiums for bulls.

9. In exceptional circumstances the Department may, under certain conditions to be prescribed by them, provide for a county either by purchasing bulls on behalf of applicants selected by County Committees under Clause 17, or by granting loans to approved applicants who desire to purchase bulls through the Department.

Applications for loans under this clause should be made—by the selected individuals—directly to the Department not later than 1st March, 1911.

10. Subject to the approval of the Department, premiums may be restricted to one or more breeds of pure-bred bulls or registered dairy bulls.

11. Only bulls entered, or qualified by pedigree for entry, in the herd books of their respective breeds, or in the Department's register of Dairy Cattle shall be eligible for premiums. The owner of a pure-bred bull not entered must, if required, produce a certificate from the secretary of the herd book to the effect that the bull is eligible for entry and will duly appear in the next volume. (See Clause 16 (2)). In the case of a registered dairy bull a certificate from the Department must be produced.

12. Bulls of the following ages are eligible to compete for premiums:—

- (1.) Yearlings, calved between 1st September, 1909, and 1st May, 1910;
- (2.) Two-year-olds, calved between 1st September, 1908, and 31st August, 1909;
- (3.) Three-year-olds, calved between 1st September, 1907, and 31st August, 1908;
- (4.) Four-year-olds, calved between 1st September, 1906, and 31st August, 1907.

All bulls must show a high degree of excellence. Two-year-olds, three-year-olds, and four-year-olds which show signs of having been badly cared, or which are not fully developed, will not be selected.

13. The amount of a premium for a high-class pure-bred bull (other than a Galloway, Kerry, Dexter, Welsh, or Ayrshire bull) payable, subject to the regulations of this scheme, at the end of the season shall be not less than £10 nor more than £15. Where special provision for the use of Galloway, Kerry, Dexter, Welsh, and Ayrshire bulls is made with the approval of the Department, the value of the premiums shall be £10. In the case of registered dairy bulls the premium shall be £10.

14. The owners of all two-year-old, three-year-old, and four-year-old bulls applying for premiums under this scheme must, if required, produce evidence of the fruitfulness of the bulls in the preceding year.

15. (1.) Bulls which were awarded premiums in 1910 will be inspected by the Department prior to the spring shows and sales, at places and on dates of which the owners will be duly advised by the Department.

In no case will an animal be inspected at the owner's residence.

(2.) Owners of such bulls failing to present their animals for inspection on the dates selected will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of bulls which have been passed under this clause as eligible for premiums in 1911.

(4.) The County Committee shall then proceed to select applicants for premiums for bulls to be selected at any of the principal shows or sales of bulls. In making such selections regard shall be had to the needs of the various districts in the county, provided that no two bulls of the same breed shall be located in the county within three miles of each other.

(5.) A bull provisionally selected for a premium under this clause must stand for service at the same place as in 1910, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling bull.

16. (1.) Bulls of the ages specified in Clause 12, other than those referred to in Clause 15 (3), shall be selected at the principal spring shows and sales. The provisional selection of bulls for premiums at these shows and sales shall be made by the Department alone.

(2.) Only those pure-bred bulls will be inspected for premiums the owners of which have given a written undertaking to the effect that when so required by the Department they will have their provisionally selected bulls duly entered in the herd books of the respective breeds.

(3.) Intending purchasers must make their own selection from the list of animals passed by the Department.

17. (1.) The County Committee shall, by means of advertisements in the local papers or by posters, invite applications from persons who, if selected, are prepared to keep in districts not provided for in Clause 15 premium bulls to be purchased or exhibited at one or other of the principal shows or sales. Such applications must be made on forms to be obtained from the Secretary.

(2.) A list of such applicants, when selected by the County Committee should be forwarded to the Department by the Secretary, on the form provided for that purpose, not later than five days before the show or sale at which the bulls are to be selected.

(3.) The Department's Inspector or Inspectors will attend at the principal shows and sales. They shall not be empowered to recognise applications from any persons attending the shows or sales whose names are not on the list supplied by the Secretary as having been duly selected to keep premium bulls.

(4.) Applicants selected by a County Committee exhibiting or purchasing at one of the principal shows or sales provisionally selected bulls of the breeds approved by the County Committee need not again show these bulls in 1911 for a premium. The granting of a premium to a bull shall not in any way be regarded as affording a right to a premium in a subsequent year.

(5.) As soon as a selected applicant has procured a bull which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter for the purpose. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to the location, &c., of the bull, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The service season for a premium bull shall not commence until the owner of the bull has notified the Secretary on the form mentioned in Clause 17 (5) that he has procured a bull.

The service season for premium hulls shall close on 31st December, 1911.

19. The Secretary shall supply the owner of each premium hull under this scheme with posters, which such owner must undertake to distribute in the district in which the hull is to serve.

20. Each premium yearling hull shall serve not less than thirty cows, and all other premium hulls not less than forty cows each, other than those that are the property of the owner of the hull. The service fee for the number of cows stated shall be 1s. each, inclusive of all charges, but the County Committee may, if they think fit, fix the service fee at 2s. 6d. per cow, inclusive of all charges, in the case of farmers whose valuation exceeds the minimum limit fixed by the Committee. After the minimum number of cows has been served the owner may fix such fee as he may desire.

21. The County Committee, with the approval of the Department, may make such regulations as they think necessary with regard—

(1) to the inclusion or otherwise of four-year-old hulls,

(2) to requiring applicants for premiums to deposit with their application a sum not exceeding £2 in respect of each hull—such deposit to be refunded in case the applicant is not selected by the County Committee or if he procured a premium hull. The deposit to be forfeited to the County Committee in the event of the applicant omitting to procure a premium hull).

(3.) to the number of premium hulls which any one person may keep, provided that no person shall possess two premium hulls of the same breed unless located at least three miles from each other, (see Clause 15 (4) ),

(4) to the place in which a premium hull shall remain during the season for service (see Clause 15 (5) ),

(5) to requiring the owner of a premium hull not to keep any other bull on the farm on which such premium hull is located,

(6) to the penalties to be imposed upon the owner of a premium bull who fails to take proper care of the animal.

(7) to the number of cows which any one farmer may send to a premium bull,

(8) to requiring owners of premium hulls to exhibit their animals at one of the shows subsidised by the County Committee,

(9) to requiring owners of premium hulls to retain their animals in the district until 1st September, 1911.

(10) to cancelling the award of a premium to a hull which is sold out of the country before it has served the prescribed number of cows,

(11.) to the exclusion of pedigree cows from this scheme,

(12) to requiring selected applicants to purchase such premium hulls only as are certified to have passed the tuberculin test, and

(13) To any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

22. Each cow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding or holdings, wherever situated and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans and *bona fide* agricultural labourers may obtain service for their cows on the same terms as farmers.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. The owner of a premium hull shall not, before the stipulated number of cows has been served, reserve the use of the hull for cows the property of any individual or of the members of any society. He must, subject to the provision of Clause 29, allow the hull to serve cows in the order in which they are presented.

25. The Department reserve the right to brand or mark premium hulls, and to inspect them from time to time.

26. The Department also reserve the right to apply the tuberculin test, at their own expense, to any premium hull. See Clause 21 (12).

27. The owner of each premium bull must satisfy the County Committee that he has provided himself with a syringe and disinfecting materials, and that these have been regularly used on the bull after each service, in accordance with the instructions given in the Department's leaflet No. 13, on Contagious Abortion in Cattle.

It will be the duty of the Secretary to obtain this information for the Committee, and to notify the Department at an early date of the results of his inquiries.

It will also be the duty of the Secretary to arrange that the owner of each premium bull shall distribute among owners of cows in his district a number of copies of the Department's leaflet No. 13.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of the bull being unable from any cause to complete the prescribed number of services, the Department reserve the right to withhold the premium, or any part of it, or in any other way to deal specially with the case, as the circumstances may require.

29. The owner of a premium bull has the right to refuse the use of his bull in any case where he is satisfied that the service would be prejudicial to the animal. The reasons for such a refusal, however, must, immediately on the refusal of the application, be communicated to the County Committee, who may take such action as they think fit subject to the approval of the Department.

30. (1.) Not earlier than 1st September, 1911, and not later than 15th January, 1912, the owner of each premium bull shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose cows have been served by the bull—together with dates of such services—at the fee named in Clause 20.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme the Secretary will be notified that payment of the premium or part of the premium payable under this scheme may be made to the owner of the bull.

(4.) Any premium not applied for on or before 15th January, 1912, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

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#### Scheme No. 3.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS OF SWINE.

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1911.

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Clauses 1 to 7, inclusive, of the Department's Horse and Cattle Schemes, 1911, shall, with the necessary modifications, apply to this scheme.

#### SWINE.

8. The system to be adopted in connection with this scheme for encouraging improvement in the breeds of swine shall be the provision of premiums for selected boars.

9. Subject to the approval of the Department premiums may be restricted to one or more of the following breeds of swine, viz.: Large White York, Large Black, Large White Ulster.

10. Only boars eligible for entry in the Herd-books of their particular breeds, in the Register of Pigs of the Royal Dublin Society, or in the

Register of Ulster Swine established by the Royal Ulster Agricultural Society, shall be eligible for premiums. The owner of a boar selected for a premium must, if required by the Department, have the animal entered in the proper Herd-book or Register as the case may be.

11. Boars belonging to any Society or to any Association of Farmers shall be eligible to compete for premiums; but the premiums shall be paid to the Society or Association, and not to the individuals in whose charge the boars are placed.

12. A boar when inspected for the first year's premium should be not less than five months nor more than twelve months old. The grant of a premium to any boar shall not be regarded as affording any right to a premium in a subsequent year.

13. The value of a premium shall not exceed £5 for the first year, and £3 for the second year.

14. Only those boars which were awarded first year premiums in 1910 shall be eligible for second year premiums in 1911. All such boars must show a high degree of excellence. Two-year-old boars which show signs of having been badly cared for or are not fully developed will not be selected.

The owner of a boar selected for a second year premium must produce evidence of the fruitfulness of the boar in the preceding year.

15. A boar which may be awarded a premium in 1910 out of funds administered by any other body shall not be eligible for a premium under this scheme.

16. (1.) Boars which were awarded first year premiums in 1910 will be inspected by the Department at places and on dates of which the owners will be duly advised by the Department.

(2.) Owners of such boars failing to produce their animals for inspection on the date selected will not have their cases re-considered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of boars which have been passed under this clause as eligible for premiums in 1911.

(4.) The County Committee shall then proceed to select applicants for premiums for young boars. In making such selection regard shall be had to the needs of the various districts in the county, provided that no two boars shall be located in the county within three miles of each other.

(5.) A boar provisionally selected for a premium under this clause must stand for service at the same place as in 1910, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling boar.

17. (1.) The County Committee shall, by means of advertisements in the local papers or by posters, invite applications from persons who, if selected, are prepared to keep premium boars in districts not already provided for under Clause 16 of this scheme. Such applications must be made on forms to be obtained from the Secretary.

(2.) As soon as a selected applicant has procured a boar which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to the location, &c., of the boar, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The provisional section of boars for premiums will be made by the Department alone at the principal spring shows and at other places to be fixed by the Department, but no inspection for the purpose of this scheme will be made after the 30th June, 1911, save in exceptional circumstances.

19. The Department, through the County Committee, will as far as practicable assist intending purchasers to secure suitable boars for the purposes of this scheme.

20. The service season for a premium boar shall not commence until the owner of the boar has notified the Secretary on the form mentioned in Clause 17 (2) that he has procured a boar. The service season for premium boars shall close finally on 31st December, 1911.

21. The Secretary shall supply the owner of each premium boar under this scheme with posters, which the said owner must undertake to distribute in the district in which the boar is to serve.

22. Each first year premium boar must serve not less than 30 sows, and each second year boar not less than 40 sows, other than those that are the property of the owner of the boar. The service fee, inclusive of all charges for this number of sows, shall not exceed 1s. for each sow. After the minimum number of sows has been served, the owner of the boar may fix such fee as he may desire.

23. The County Committee, with the approval of the Department, may make such regulations as they think necessary with regard—

- (1.) to the breed or breeds of boars to be selected (see clause 9),
- (2.) to the number of premium boars which any one applicant may possess (provided no person shall possess two premium boars unless located at least three miles from each other),
- (3.) to the place in which a premium boar shall remain during the season for service (see clause 16 (5)),
- (4.) to requiring the owner of a premium boar not to keep any other boar on the farm on which such premium boar is located,
- (5.) to the penalties to be imposed upon the owner of a premium boar who fails to take proper care of the animal,
- (6.) to the number of sows which any one farmer may send to a premium boar under this scheme,
- (7.) to requiring owners of premium boars to exhibit their animals at one of the shows subsidised by the County Committee,
- (8.) to requiring owners of premium boars to retain their animals in the district until 1st September, 1911, and
- (9.) to any other matter under this scheme.

All regulations so made shall take effect in the county as if incorporated in this scheme.

24. Each sow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding, or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans, and *bona fide* agricultural labourers may obtain service for their sows on the same terms as a farmer.

25. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

26. The owner or owners of a premium boar shall not, before the stipulated number of sows has been served, reserve the use of the boar for sows the property of any individual, or of the members of any society. Subject to the provisions of Clause 29, sows must be served by a premium boar in the order in which they are presented.

27. The Department reserve the right to brand or mark premium boars, and to inspect them from time to time.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of a boar being unable, from any cause, to complete the prescribed number of services, the Department reserve the right to withhold the premium, or any part of it, or in any other way to deal specially with the case, as the circumstances may require.

29. The owner of a premium boar has the right to refuse the use of his boar in any case where he is satisfied that the service would be prejudicial to the animal. The reason for such refusal must, however, be communicated to the County Committee immediately on the refusal of the application.

30. (1.) Not earlier than 1st August, 1911, and not later than 15th January, 1912, the owner of each premium boar shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose sows have been served by the premium boar—together with dates of such services—at the fee named in Clause 22.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary will be notified that payment of the premium, or part of the premium, payable under this scheme may be made to the owner of the stallion.

(4.) Any premium not applied for on or before the 15th January, 1912, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

Scheme No. 4.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

LOANS FOR THE PURCHASE OF STALLIONS.

1911.

1. Applications for loans for the purchase of Stallions must be made—on the prescribed form (A. 37)—direct to the Department.

2. No application for a loan for the purchase of a Stallion will be considered if coming from a locality in which, in the opinion of the Department, there is already a sufficient number of approved Stallions for the purpose of their scheme.

No loans will be made save for the purchase of Stallions accepted by the Department under the Horse-breeding scheme for 1911.

The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The individual or association (hereinafter referred to as the applicant) applying for a loan must be approved by the Department.

4. The purchase price of the Stallion must be approved by the Department.

5. The applicant must pay to the Department (1) one-third of the approved purchase price, (2) the amount of the stamp duty, and (3) the premium for the insurance of the Stallion at the full amount of the approved purchase price—the payment to the Department of this premium must be secured under conditions similar to those provided for the repayment of principal and interest. (See 7 and 8.)

6. On receipt by the Department of (1) one-third of the agreed on purchase money, (2) the necessary stamp duty, (3) the premium for insurance, and (4) a form of undertaking to have the necessary bond duly completed without delay, the Department will pay to the vendor the full amount of the agreed on purchase price, and will intimate to him that possession of the Stallion may be given up to the applicant.

If the vendor, before being paid by the Department, gives up possession of the Stallion, the Department will hold themselves free of any liability to the vendor.

7. As soon thereafter as possible the applicant, with two or more approved solvent sureties, shall enter into a bond to repay the Department the amount which will be advanced by them—viz., two-thirds of the purchase-money—in five equal annual instalments, payable on the 1st November in each year, together with interest at the rate of 2½ per cent. on the outstanding balance. The first instalment shall be payable on the 1st November next succeeding the date of payment by the Department of the full purchase price to the vendor.

8. In the case of an association repayment must be guaranteed by the Committee of the association, or in such other manner as the Department may require.

9. The Stallion shall remain the property of the Department until all instalments or arrears of principal and interest are paid off, and shall not be disposed of, without the consent in writing of the Department, for five years.

10. The applicant must offer the Stallion each year for registration, must undertake to conform at all times to the regulations of the Department's scheme for the time being for encouraging improvement in the breeds of horses, and, during the continuance of the loan, must allow the stallion to serve nominated mares at a fee to be fixed by the Department.

Such fee, however, shall in no case exceed £3 per mare.

11. Nominated mares the property of the members of an association purchasing a Stallion under this scheme shall not take priority of service over nominated mares owned by non-members.

As soon, however, as the number of nominated mares required by the scheme have been served, the service of the Stallion may be retained exclusively for the use of the members of such association.

12. The applicant must observe the following conditions:—

(1) In the event of the horse becoming ill or lame, he must without delay give notice in writing or by telegram to the Department. Like notice must be given—

(a) If the horse meets with any accident or injury, and

(b) If the horse dies. In the latter event he must furnish at his own expense a certificate from a Veterinary Surgeon.

(2) He must provide proper accommodation for the Stallion, and care it in a proper manner to the satisfaction of the Department.

(3) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

13. The Department shall have the right to inspect the Stallion at any time, and to remove it at any time, if it is found, in the opinion of the Department, that it is not being properly cared, or if an instalment of the principal and interest is in arrear for more than four weeks.

14. Should the Department grant a special subsidy in respect of the Stallion such subsidy shall not be paid to the individual or association in possession of the Stallion, but shall be credited, after the close of the season, towards the repayment of the loan.

15. The decision of the Department in all matters relating to these loans shall be final.

Forms of application can be had from the Department.

Scheme No. 5.

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### LOANS FOR THE PURCHASE OF BULLS.

1911.

1. Applications for loans for the purchase of Bulls should be made—on the prescribed form (A. 38)—direct to the Department before 1st March, 1911.

2. No application for a loan for the purchase of a Bull will be considered if coming from a locality in which, in the opinion of the Department, there is already a sufficient number of pure bred Bulls for the purpose of their scheme. No loan will be granted save for the purchase of a pure bred yearling Bull passed by the Department as suitable for a premium. The Bull must be of a breed approved by the County Committee. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The purchase price of the Bull must be approved by the Department.

4. The person applying for a loan under this scheme—hereinafter referred to as "the applicant"—must purchase through the Department, who cannot undertake to consider applications for loans in respect of animals purchased without their knowledge, at shows, sales, or from



private individuals. The Department will, as far as possible, endeavour to procure a suitable animal for the applicant, but they cannot undertake to supply a Bull at a price fixed by him.

5. Before taking possession of the Bull the applicant will be required to pay to the Department's representative—(1) one-third of the approved purchase price, (2) the stamp duty, and (3) the charge for insurance (see Clause 9). Further, he must sign a form of undertaking to have the necessary form of guarantee for repayment duly signed and completed.

6. As soon thereafter as possible, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount which will be advanced by them in two equal annual instalments, payable on the 1st day of April in each year, the first instalment to be payable on the 1st day of April in the year following that in which the Bull was purchased, together with interest at the rate of  $2\frac{1}{2}$  per cent. on the outstanding balance.

7. In the case of an association the person in whose charge the Bull is to be placed must, with two other approved members of the association in their capacity of private individuals, guarantee repayment of the loan.

8. The Bull shall not be disposed of without the consent of the Department having been previously obtained in writing. The animal shall remain the property of the Department until all instalments of principal and interest are paid off.

9. The applicant must insure the Bull with the Department for the full amount of the purchase price. The fee for insurance against death shall be 5 per cent. on the full amount of the purchase price, and shall be paid to the Department.

10. The Department will insure the Bull with an insurance company for twelve months only from the date of payment of the insurance fee by the applicant. In the event of the death of the bull before the expiration of the twelve months in question the loan will be cleared off and the applicant will be refunded the part of the purchase price which he deposited with the Department on getting possession of the Bull, less interest on loan to date of death of the Bull.

It will be optional with the applicant to insure the Bull for a second year.

11. The applicant must observe the following conditions:—

(1.) In the event of the Bull getting ill or lame he must, without delay, give notice in writing or by telegram to the Department. Like notice must also be given (a) in the event of any accident or injury occurring to the Bull, and (b) in case of the death of the Bull.

(2.) He must take all reasonable precautions to prevent the Bull from coming into contact with any animal suffering from disease.

(3.) He must provide proper accommodation for the Bull and care it in a proper manner, to the satisfaction of the Department.

(4.) He must procure at his own expense a syringe and disinfecting materials and use same for the washing of his Bull after each service, in accordance with the instructions given in the Department's leaflet No. 13 on contagious abortion in Cows.

(5.) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

(6.) In the case of the death of the Bull he must forward a certificate from a Veterinary Surgeon or such other evidence as to the cause or fact of death as the Department may require.

12. The granting of a loan does not imply that a premium will be awarded in respect of the Bull.

Should the Bull be awarded a premium (1) the person in whose favour the loan is being granted must conform to the regulations of the Department's scheme for the improvement of the breeds of cattle, or any modifications therein made, with the approval of the Department, by the County Committee; and (2) the amount of such premium shall be paid to the applicant, after the provisions of the general scheme have been complied with.

## 13. The Department shall have the right

(a) to inspect the Bull at any time, and to remove it at any time, if it is found, in the opinion of the Department, that it is not being properly cared, or in the event of an instalment of principal and interest being in arrear for more than four weeks;

(b) to brand or mark the Bull;

(c) to apply the tuberculin test, at their own expense, to any Bull purchased under this scheme.

## 14. The decision of the Department in all matters relating to these loans shall be final.

Forms of application can be had from the Department.

Scheme No. 6.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SUBSIDIES TO AGRICULTURAL AND INDUSTRIAL  
SOCIETIES, ETC.

1910-1911.

1. County Committees of Agriculture may, subject to the approval of the Department and to the conditions of this scheme, grant subsidies to societies established for the purpose of—

(a) Holding Agricultural, Poultry, Horticultural, and Farm Produce Shows; Industrial Shows or Exhibitions and Fairs; Skilled Labour Competitions, Implement Trials, Ploughing Matches, etc.

Provided, however, that the grant to any one Ploughing Match shall not exceed £5, irrespective of the number of competitions at such Match.

(b) Obtaining for its members Analyses of Manures and Feeding Stuffs, Seed Tests, etc.

2. (1.) A show society, or other body, desiring to obtain a grant under this scheme must make application on the prescribed form not later than 1st February, 1911, to the County Committee, and must at the same time furnish the following particulars in respect of each show held by the society in 1910, viz. :—

(a) A balance sheet duly certified to have been audited and found correct by two persons not being members of the committee of the show society or other body concerned, and setting forth in detail the financial position of the society after all liabilities have been discharged, and also

(b) If required, a list certified by the Secretary of the show society or other body, setting forth the amounts actually collected in local subscriptions from private individuals in 1910.

*Any Society or other body which fails to furnish these particulars, or such further information as the County Committee or the Department may require shall not be eligible to receive a subsidy.*

(2.) It shall be the duty of the Secretary to the County Committee, by means of advertisements or otherwise, to invite applications in accordance with the provisions of this scheme, from all societies or other bodies concerned, and to submit same with the necessary particulars to the County Committee as soon as possible, but not later than at a meeting of the Committee held in the month of February, 1911.

(3.) Not later than 1st March, 1911, the County Committee shall forward to the Department the foregoing documents together with their recommendations as to the distribution of funds available under this scheme.

3. In allocating the funds available under this scheme, County Committees should consider the claims of the various Shows held in the county and the special requirements of particular districts.

The County Committee in allocating a grant to any particular show shall take into consideration:—

- (1.) The amounts actually collected in local subscriptions from private individuals in 1909 and 1910.
- (2.) The total value of prizes awarded in 1910, and the cost of administration.
- (3.) The regard paid by the society to the furtherance of the Department's live stock, poultry, and other county schemes.
- (4.) The amount set aside for classes confined to small farmers.

4. The prize schedule for 1911 must, prior to publication, be submitted through the County Committee to the Department for approval in writing. The Department will not consider any schedule which has not previously received the approval of the County Committee.

5. The amount of the joint contribution from the County Committee and the Department must be acknowledged in the prize schedule.

6. In the case of live stock shows, other than shows confined to horses, provision must be made in the schedule of prizes for the inclusion of classes for sheep and swine and for poultry of the breeds subsidised by the County Committee.

7. Each society receiving a subsidy under this scheme shall, if required, afford all reasonable facilities for the inspection of their books by the Department, and shall admit the Department's Inspectors to the judges' ring; during all adjudications on the day of the show.

8. Grants from the joint fund available under this scheme may be given to new show societies, provided the County Committee and the Department are assured:—

- (1.) That there is need for such new societies in the county;
- (2.) That adequate local support is forthcoming; and
- (3.) That the rules and financial proposals of the society are deemed satisfactory.

9. The cost of employing judges must be defrayed by show societies out of their own funds. The Department cannot undertake to supply the services of a judge or demonstrator for any show or competition.

If the County Committee approve, one or more of the Instructors employed under county schemes may be permitted, for the purpose of giving demonstrations, to attend a show subsidised by a County Committee.

10. (1.) Immediately after the show or competition the Secretary of the society or other body shall furnish to the County Committee a certificate as to the total amount actually awarded in prizes, exclusive of cups and presentation prizes (the value of which should be stated separately), and the County Committee shall forward such certificate to the Department.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the County Committee will be notified that payment may be made to the show society or other body of the full amount of the subsidy or part of the subsidy as the case may be.

(3.) In the event of the total sum actually awarded in prizes at any show or competition being less than the sum originally voted by the County Committee, the show society or other body managing the show or competition shall not be entitled to receive payment from the joint fund of any sum exceeding the amount actually awarded in prizes, exclusive of cups and presentation prizes.

11. Non-compliance with any of the foregoing regulations will render a show society or other body ineligible for a grant under this scheme, and will entail the cancellation of any subsidy proposed to be given by the County Committee to such show society or other body.

12. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

The Department recommend that each Agricultural or other Show Society receiving a subsidy under this Scheme should invite the County Committee to nominate one or more representatives to act on the Show Committee.

Scheme No. 7.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

PRIZES FOR 'COTTAGES AND SMALL FARMS,  
1911.

1. In 1911 County Committees of Agriculture may, subject to the Department's approval, offer prizes in one or both of the following sections, subject to the provisions of this scheme, viz. :—A. Cottages with gardens, B. Small farms.

In Section A. County Committees may offer prizes in any one of the following ways :—(1) wholly in cash, (2) wholly in fruit trees and seeds, (3) partly in cash and partly in fruit trees and seeds.

A County Committee may delegate the working of this scheme to a society eligible for a grant under the scheme of subsidies to agricultural and industrial societies.

2. Competition in Section A. shall be confined to *bona-fide* cottagers as defined by the County Committee. Cottagers on whose holdings demonstration plots in connection with the scheme of instruction in horticulture are situated, shall, however, be ineligible to compete.

Only *bona-fide* farmers who derive their means of living mainly from farming, who reside on their farms and work the farms themselves, will be eligible to compete in Section B. At least one-fourth of the arable land of the entire holding of each competitor in this section must be tillage, first year's grass or meadow being regarded as tillage.

Teachers in National or other primary schools are ineligible to compete under this scheme.

3. For the purposes of this scheme the county may be divided into districts or circuits, in each of which separate competitions will be held.

4. Particulars as to the sections adopted, the number of districts or circuits into which the county is divided, the number of classes in each section, the limits of valuation or acreage fixed by the County Committee for each class, and the number and value of the prizes offered, must be submitted to the Department on the prescribed form for approval.

5. Entries must be made on special forms to be obtained from the Secretary of the County Committee. Each competitor must forward one of these forms, accurately filled up in every detail, so as to reach the Secretary of the County Committee on or before a date to be fixed by the County Committee, but in no case later than the 20th May, 1911.

No holding will be inspected in respect of which the owner fails to fill in an entry form.

It shall be the duty of the County Committee to examine these entry forms and to satisfy themselves, as far as practicable, as to the eligibility of each entrant before the list of competitors is supplied to the judge.

6. In cases of insufficient competition, want of merit, or in which the conditions of this scheme have not been strictly adhered to, the prizes may be withheld in whole or in part.

7. The following points shall be taken into consideration by the judge in making his awards :—

COTTAGE SECTION.

- (a.) Cleanliness, and general order of cottage and premises.
- (b.) Cultivation of the garden, freedom from weeds, well-kept fences and walks.

- (c.) Variety of vegetables, fruits and flowers.
- (d.) Arrangement of manure heap.
- (e.) General management and care of live stock, particularly pigs and poultry, special attention to be given to quality and housing.
- (f.) Management of bees.

#### SMALL FARM SECTION.

- (a.) Cleanliness, order and economy in the dwelling-house and offices (including poultry houses).
- (b.) Judicious character of cropping, efficiency of cultivation, arrangement of manure heap, and provision for collecting liquid manure.
- (c.) Cultivation of the garden, variety of vegetables and fruit trees.
- (d.) General condition of land under grass, care of fences, gates, water courses, &c.
- (e.) Judicious planting of shelter belts.
- (f.) Freedom from weeds, especially grass land, stack-yards and headlands.
- (g.) Cultivation of headlands.
- (h.) Management and care of live stock and poultry (quality to be particularly considered).
- (i.) Special credit will be given if simple accounts of receipt and expenditure in connection with any holding entered for competition (or with any branch of the work on the holding, such as the cost of feeding cows or pigs, of rearing calves, of keeping poultry, etc.) are kept and exhibited to the judge.

8. The Department will supply, free of charge to the County Committee, the services of an Instructor to act as judge under this scheme.

9. The judge's report shall deal with such matters in connection with the competition as the Department and the County Committee may decide.

10. The inspection of cottages or small holdings entered for competition under this scheme will be made in the months of June, July, or August.

11. The Committee shall submit the judge's report, with list of awards, for consideration by the Department, who, as soon as they are satisfied as to the fulfilment of the conditions of this scheme, will notify the Secretary of the County Committee that the prizes or reduced prizes may be paid. The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary.

12. The County Committee shall furnish to the Department such detailed statements of expenditure under this scheme as may be required from time to time.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 8.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### SCHEME FOR ENCOURAGING IMPROVEMENT IN THE FLAX- GROWING INDUSTRY.

1910-11.

The following programme has been adopted by the Department for encouraging improvement in the flax-growing industry during the season 1910-11.

#### I.—FIELD EXPERIMENTS.

Variety tests and manurial experiments will be continued. The object of these experiments is to ascertain the relative value of various varieties

of flax seed and the influence of certain manures on the yield and quality of the flax crop. Experiments on seed selection may also be undertaken. A report on the experiments carried out in 1909 will be published in the Department's *Journal*, and will be distributed in leaflet form.

## II.—COLLECTION OF STATISTICS.

Statistics with reference to the flax crop will be again collected through scutchmill owners and the managers of co-operative flax societies.

## III.—FORMATION OF FLAX SOCIETIES.

[The Department, subject to conditions to be prescribed by them, are prepared in a limited number of cases to assist farmers in establishing co-operative flax societies by paying a portion of the salary of an approved manager for a period not exceeding three years.

Applications for assistance of this nature should be made to the Secretary of the Department.

## IV.—PRIZES FOR GROWERS, &c., OF FLAX.

County Committees of Agriculture in the flax growing counties may adopt either or both of the following sections:—

(A.) Prizes for Scutched flax.

(B.) Prizes for flax on foot.

### SECTION A.

For the purpose of this section a county may be divided into districts, in each of which a show of scutched flax may be held, at which it is suggested the following prizes be offered:—

(A.)—*Growers.*

First prize, . . . . .	£3
Second prize, . . . . .	£2
Third prize, . . . . .	£1

(B.)—*Scutchers.*

Scutchers employed in the mill where the first prize lots were scutched:—

£2.

Scutchers employed in mills where the second prize lots were scutched:—

£1.

(C.)—*Other employees.*

For other persons employed in the mill where the first prize lots were scutched:—

£2.

Similar employees in mills where the second prize lots were scutched:—

£1.

(D.)—*Mill-owners.*

*This class may be omitted if the County Committee so desire.*

Owners of mills in which the first prize lots were scutched:—

£2.

Owners of mills in which the second prize lots were scutched:—

£1.

### SECTION B.

For the purpose of this section the county may be divided into districts, in each of which prizes for flax on foot may be offered, e.g.:—

(a.) For growers the valuation of whose holding does not exceed £10, and who grow at least half a statute acre of flax or sow at least  $\frac{1}{2}$  bag of seed.

(b.) For growers the valuation of whose holding exceeds £10 but does not exceed £25, and who grow at least one statute acre of flax or sow at least  $\frac{1}{2}$  bag of seed.

(c.) For growers the valuation of whose holding exceeds £25 but does not exceed £50, and who grow at least two statute acres of flax or sow at least 1 bag of seed.

(d.) For growers the valuation of whose holding exceeds £50, and who grow at least three statute acres of flax or sow at least  $1\frac{1}{2}$  bags of seed.

*N.B.—The limits of valuation in the foregoing classes are not prescribed; they are merely inserted as an indication to County Committees to encourage the small grower.*

The County Committee may require growers entering flax for competition under this section to pay an entry fee.

When judging growing crops the judge shall take into consideration:—

(a.) Freedom of crop from weeds;

(b.) Uniformity of crop;

(c.) Length and quality of crop.

#### GENERAL REGULATIONS.

1. A County Committee adopting this scheme should appoint from among their own members a special sub-committee for flax, which must be restricted to six members, who should as far as possible be experienced flax growers or scutchmill owners; and this sub-committee should be given full authority to administer the county scheme when sanctioned in writing by the Department.

2. The sub-committee shall be responsible for organising shows under section A., and for making all arrangements in connection with sections A. and B.; but no payments under this scheme shall be authorised, except by the County Committee.

3. The County Committee shall, by means of advertisements in the local papers and by posters, invite applications on special forms from persons in the county desirous of competing for the prizes offered under this scheme. Copies of these posters must be forwarded to the Department.

4. Not less than six weeks before the date of the first show, when section A. has been adopted, and not later than 31st March, 1911, in the case of section B., the County Committee must submit, for the approval of the Department, on the form provided for the purpose, a complete statement showing:—

In regard to section A.—(1) the classes to be provided at each show; (2) the quantity of flax to be exhibited by one person in each class, which should not be less than 16 stones; (3) the number and value of the prizes to be offered; (4) the place, suggested date, and hour of each show; (5) the instructions to exhibitors, together with such conditions of award, in addition to the compulsory provisions in the following clauses as the Committee may consider desirable.

In regard to section B.—(1) the number of districts into which it is proposed to divide the county; (2) the limits of valuation in each class; (3) the number and value of prizes in each class; (4) the amount of the entry fee, if any, to be charged.

5. All growers of flax shall be eligible to compete for prizes in sections A and B, subject to the regulations of this scheme.

6. Under neither section shall a grower be paid more than one prize during the season, and under section A no individual can receive a prize both as a grower and as a mill-owner.

7. If, in the opinion of the judge, the flax exhibited under section A, or the crop inspected under section B does not show sufficient merit, the prizes must be withheld.

8. If it be discovered that any fraud, deception, or dishonest practice has been committed, either in connection with the preparation or ownership of the scutched flax or growing flax, or in any representation regarding

exhibits of flax—scutched or growing—which may have affected, or have been intended to affect, the decision of the judge or judges, the offending person shall be disqualified, and shall be debarred from obtaining any future benefits under the Department's scheme. He shall also forfeit any claim in respect of prizes awarded under this scheme. The Department reserve the right to publish the names of such persons if deemed expedient.

9. No action shall be taken by the County Committee towards putting any portion of this scheme into operation until the sanction of the Department to the Committee's proposals has been obtained, in writing. The scheme, when sanctioned by the Department, must be considered as final for the year.

10. The County Committee shall, subject to the approval of the Department, appoint a competent judge or judges under this scheme. The person appointed under section A must not be a resident of the county in which he is to act.

The person appointed under section B may act as judge in the county in which he resides, but not in the district, as defined in this scheme, in which his residence is situated.

11. (1.) Not later than six days after the holding of each show the Secretary of the County Committee shall submit to the Department for approval, on the form provided for the purpose, a statement showing the name and address of each of the prize-winners under section A, and the amount of the prize to which each winner is entitled. (2) Similar returns in respect of competitions in section B should be furnished to the Department within one week after the work of judging has terminated. (3) The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary of the County Committee.

12. The Secretary of the County Committee shall keep a separate account of expenditure in connection with each section of this scheme, and shall furnish same to the Department when required.

13. Subject to the foregoing regulations being complied with, the Department will be prepared to refund County Committees 50 per cent. of all authorised expenditure under this scheme.

14. The decision of the Department in all matters of dispute in connection with this scheme shall be final.

#### Scheme No. 9.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### INSTRUCTION IN AGRICULTURE, 1910-11.

1. The Department are prepared to approve the appointment of at least one Instructor in Agriculture for each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for an Instructorship in the county of which he is a native, or in which he resides permanently.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The salary of the Instructor shall not exceed £200 per annum (inclusive of maintenance and hotel expenses), in addition to expenses of locomotion, which include second or third-class railway fare as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1911, and shall be terminable at any time previous to that date by the giving of three months' notice in writing on either side.



4. (1.) It will be the duty of the Instructor, who should take every opportunity of discussing with farmers matters affecting their interests—

(a) to conduct such field and live stock experiments and demonstrations as may be approved by the Department, including the selection of suitable land, the supervision of the sowing of the seeds and manures, and of the keeping of the plots free from weeds, the weighing of the produce, the tabulation of the figures and the preparation of reports on the results ;

(b) to deliver lectures on agricultural subjects, such as soils, manures, seeds, pastures, crops, and their cultivation, and the breeding, feeding, and management of live stock, especially of dairy cattle.

(c) to visit farms ;

(d) to reply to letters from farmers seeking information ;

(e) to make known as widely as possible the facilities provided by the Department for the training of young men who intend to become farmers and, especially, to endeavour to secure the attendance of farmers' sons at Winter Agricultural Classes ;

(f) to advise farmers (i.) how they can take advantage of the Department's Seed Testing Station, (ii.) as to the planting of forest trees for shelter and ornament, (iii.) how they can best avail themselves of all approved county schemes, and (iv.) how they may take advantage of agricultural co-operation ;

(g) to act as official sampler under the Fertilisers and Feeding Stuffs Act, to make known the provisions of this Act, of the Destructive Insects and Pests Acts, and of the Weeds and Agricultural Seeds (Ireland) Act ;

(h) to furnish to the County Committee and to the Department, as may be required, reports on the progress of his work and on matters relating to the agricultural industry of the county ; and

(i) generally to give his whole time to the work and to do all in his power to further the interests of agriculture in the county.

(2.) The Instructor may also be required (a) to assist in the teaching of Winter agricultural classes, (b) to assist in carrying out the provisions of the scheme for the registration of dairy cattle, by the weighing and testing of milk, &c., and (c) to act as judge in connection with the scheme of prizes for cottages and small farms in a county other than that in which he acts as Instructor.

NOTE.—The employment of the Instructor to teach winter agricultural classes will not relieve him of his other duties under this scheme, and accordingly when he is occupied in teaching for four days in a week the Instructor should deliver at least one lecture in the same week on a day when not engaged in teaching, as well as attend as far as practicable to the other branches of work above mentioned.

If occupied less than four days a week in teaching such classes, the number of lectures and demonstrations should be correspondingly increased.

5. The Instructor shall, so far as the moneys allocated by the County Committee will permit, make arrangements to have experimental and demonstration plots in each section or circuit into which the county may be divided under Clause 6, and during the summer months meetings of farmers should be held at these plots to discuss the objects, &c., of the plots. In selecting sites for plots preference should be given to localities in which agricultural classes have been held during the preceding winter.

During the winter months—viz., from the beginning of October to the end of February—the County Committee should arrange for a series of lectures by the Instructor in each circuit. At least one lecture in each circuit should deal with the results of the field experiments carried out in the previous season.

6. For the purposes of this scheme County Committees will find it convenient to divide the county into a number of sections or circuits, in which the Instructor should work in turn.

When is it intended that a lecture should be given in a particular locality,

the County Committee should appoint a small local committee, who should undertake to secure the necessary accommodation for the purpose and to arrange for the lighting, heating, &c., of the room in which the lecture is to be delivered. No work of this nature should be undertaken by the Instructor.

The County Committee alone are responsible for seeing that the Instructor's time is fully and usefully employed, and that he pays due regard to the performance of the duties for which he is appointed. With this end in view, the County Committee should take such steps as may seem to them most effective to make known to farmers in the county that an Instructor is available to afford advice on all matters affecting their interests.

The County Committee shall obtain the Department's approval in writing for all payments in respect of materials for experiments and demonstrations, and articles of equipment required by the Instructor, and shall keep a separate account of all expenditure under this scheme. Detailed statements of such expenditure as may from time to time be required shall be furnished to the Department by the County Committee.

7. It will be the duty of the Secretary of the County Committee to furnish such returns in connection with this scheme as the Department may require; to forward to the Department copies of all advertisements, posters, or handbills issued by the Committee; and to keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme.

8. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

9. In all matters of dispute relating to this scheme the decision of the Department shall be final.

Scheme No. 10.

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### WINTER AGRICULTURAL CLASSES.

1910-11.

1. The County Committee may employ as teacher for agricultural classes (1) for not more than four days per week, the Itinerant Instructor in Agriculture, if approved by the Department, or (2) an approved teacher or assistant Instructor who would devote his whole time to the classes.

In the event of the Itinerant Instructor being employed as teacher, he shall devote the remaining days of the week to duties in connection with the scheme of itinerant instruction in agriculture.

2. (1.) The aim of the instruction is to impart such knowledge as is capable of direct practical application to farm work. The subjects taught will be as follows:—Soils, tillages, manures (natural and artificial), seeds, grasses, weeds, farm pests, treatment of pasture, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, simple farm account keeping, mensuration, elementary chain surveying, and elementary science explanatory of the principles underlying ordinary farm practice. As far as possible the lessons should be illustrated by practical demonstrations.

At each centre special attention will be devoted to farm calculations in connection with the cost of growing crops or raising stock, with direct reference to the practice prevailing in the district.

(2.) The County Committee may arrange for a few outdoor demonstrations in the planting and after treatment of fruit trees, to be given to

the students by the County Instructor in Horticulture, but no lectures on horticulture shall be given.

3. (1.) In order to bring the classes within the reach of as many young men as possible, it will be necessary for the teacher or assistant instructor in each county to give instruction at two or three centres, at each of which he shall attend for *three or two* days weekly, during a period of about sixteen weeks, from November to March. Unless in exceptional circumstances, centres at which agricultural classes have been held previously, shall not be selected under this scheme.

(2.) In fixing the days of the week on which the classes are to be held at any centre, the County Committee should have regard to the dates of fairs and markets, as well as to any local circumstance which might interfere with the attendance of students on certain days.

4. (1.) The County Committee shall, by means of advertisements in the local newspapers and by posters and leaflets, invite applications for admission to the classes. Copies of these posters and leaflets must be forwarded to the Department as soon as issued.

The County Committee may make such regulations as they think necessary with regard to—

(a.) the maximum age of students to be admitted to the classes; and

(b.) the admission to classes of students who have previously attended similar classes, provided that admission to an elementary class shall not be approved in the case of any student who has attended two previous classes.

(2.) Applications for admission to the classes must be made to the Secretary of the County Committee, on forms provided by him for the purpose.

(3.) Admission to the classes will be conditional on the applicants satisfying the Department that their general education is sufficient to enable them to benefit by the instruction given.

(4.) The classes shall be held in the morning and afternoon, and the hours of attendance shall be arranged to suit, as far as possible, the convenience of students who travel by rail. Instruction in subjects mentioned in Clause 2 (1) of this scheme shall be given for at least four hours each day.

(5.) The classes shall be confined to young men over sixteen years of age, who are actually engaged in farm work in the county, and not more than twenty-four students shall be admitted at any centre. If the number of students eligible for admission at a centre is less than ten, the class proposed for that centre shall not be held. Provided, however, that, subject to the approval of the Department, the County Committee, if a sufficient number of students over sixteen years of age is not available, may, if they think fit, admit young men over fifteen years of age.

(6.) No applicant shall be permitted to join a class after the lapse of two weeks from the date of the first meeting of the class.

(7.) No fee shall be charged for the course. Students must provide, at their own expense, note-books and other stationery, as directed by the teacher.

5. Students who reside beyond a radius of three statute miles from the class centre will, at the end of the course, be allowed the cost of third-class railway tickets, or one penny for each mile by which the double journey by road between their homes and their class centres exceeds six miles, provided that their attendance and progress are regarded by the Department as satisfactory. No student will be regarded as having attended satisfactorily who shall not have been present at five-sixths of the meetings of his class unless his absence shall have been due to illness or other unavoidable cause.

Meat meals shall not be provided for students attending the classes.

6. It is recommended that a County Committee adopting this scheme should appoint, from amongst their own members, a special sub-committee of not more than six members who should be empowered to make, in consultation with the Department's Agricultural Inspector, the necessary

arrangements for the organisation and holding of the classes. Particulars of the arrangements made are to be at once submitted on Form A 196 for the Department's approval. In the event of any alteration in the time table of a class being subsequently found desirable, the Department's approval for same should be applied for without delay. No payments under this scheme shall be authorised except by the County Committee.

7. It shall be the duty of the teacher of Agriculture to keep a register of attendance of the students on the form provided, and in the manner prescribed by the Department.

8. The Secretary of the County Committee shall—

(1.) Submit on the prescribed form, for the approval of the Department, the details of the scheme as proposed for the county ;

(2.) At the earliest possible date after the opening of the classes, furnish to the Department, on the prescribed form, a return of the students in attendance, showing for each student the mode of travelling to the class and the daily mileage ;

(3.) Obtain the Department's approval, in writing, for all payments in connection with this scheme, and keep a separate account of all such payments ;

(4.) Keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme ;

(5.) Immediately after the close of the course, take charge of the equipment provided for the classes, and furnish a list of the same to the Department ;

(6.) Submit to the Department a return of the attendance of the students and of the travelling allowances payable to them under this scheme.

9. In all matters of dispute relating to this scheme the decision of the Department shall be final.

NOTE.—(1.) If these classes are entered under the Department's revised scheme for the administration of grants to schools other than day secondary schools, the regulations of that scheme must be strictly observed.

(2.) Students of winter agricultural classes whose attendance and progress thereat have been satisfactory, receive special preference in connection with the award of agricultural apprenticeships at the Department's Agricultural Stations. Such students are exempt from the entrance examination prescribed for other applicants for these apprenticeships.

## WINTER AGRICULTURAL CLASSES.

### SYLLABUS OF THE COURSE.

Brief sketch of Origin and Formation of soils. Conditions influencing fertility. Soil improvement by draining, liming, &c.

Study of a plant, and the functions of roots, stem and leaves ; modification of these organs. Elements of plant food and their relative importance from an agricultural point of view. Conditions affecting the development of plants. Examination of the habits of growth and duration of the principal crops and weeds found on the farm, and the practical application of this knowledge.

Farmyard manure ; its storage and application. Organic and artificial manures. Composition, description and identification of artificial manures ; their valuation, time and manner of application. Mixing manures. Special manures. Fertilisers and Feeding Stuffs Act.

Rotations. Cultivation, Seeding, Manuring and Harvesting of the principal farm crops. Forage and catch crops. Study of the commonest insect pests and fungoid diseases of crops.

Characteristics, duration and adaptability for various purposes in farm practice of grasses and clovers. Identification of the different species and varieties.

Identification of farm seeds and the commoner impurities and adulterants. Germination and purity tests, how performed; the inferences to be drawn therefrom. Change of seed. Grass seed mixtures. Weeds and Agricultural Seeds Act.

Care and management of various classes of farm stock, with special reference to breeding, feeding and housing. Principal breeds of live stock, their characteristics.

Constituents of foods; their respective functions and value in animal nutrition. Valuation; manurial value. Description and uses of home grown and purchased feeding stuffs. Impurities and adulterants. Rations for various classes of farm stock. Methods of using foods.

Secretion of milk; composition; conditions influencing the quality and quantity of the milk yield. Care and treatment of milk for new-milk trade or butter-making. Cream ripening. Milk records. Respective merits and demerits of the several systems of dairying. Summer and winter dairying.

Rules for estimating the areas of the principal geometrical figures met with in chain surveying and farm calculations. Field Book; method of entering measurements; calculation and computation of areas. Practical work with the chain in the field. Plotting from the field book to given scales. Location of drains, &c., on the plans for future reference.

Method of keeping a diary, cash book, and a record of credit transactions. Farm valuations and stocktaking. Balance Sheets, their interpretation. Estimates of the cost of various farm operations, &c.

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Scheme No. 11.

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### INSTRUCTION IN POULTRY-KEEPING, 1910-11.

1. The Department are prepared to approve of the appointment of at least one Instructor in Poultry-Keeping for each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he or she is a native or in which he or she resides permanently.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. Unless in exceptional circumstances the remuneration of the Instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1911, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of a female Instructor will terminate as a matter of course on her marriage.

4. It will be the duty of the Instructor to deliver courses of lectures on poultry-keeping; to conduct classes and give practical instruction and demonstrations on the treatment of common diseases, such as gapes, &c.; on the fattening of fowls, and on the killing, plucking, trussing, and preparation of poultry for market; to visit poultry runs, and give such practical advice as may be desired by poultry-keepers; to enquire into and report upon outbreaks of disease; to inspect the egg distribution and turkey stations referred to in Clauses 10, 13, and 14; to assist selected applicants to procure suitable stock birds; to report to the Department and to the County Committee regarding the progress of his or her work either weekly

or otherwise as may be required; and generally to give his or her whole time towards promoting improvement in poultry-keeping in the county.

5. For courses of lectures the county should be divided into circuits, each comprising not less than five centres. The instructor, except in special cases, should work for at least four weeks in each circuit, and deliver one lecture per week at each centre during that time. The Instructor should visit, either on the day of the lecture or on the following day, any of the poultry runs in the neighbourhood, and give such information on poultry-keeping as the circumstances of the case may suggest.

The County Committee alone are responsible for the selection of centres and the arrangement of lectures and classes. It is desirable, however, that the Instructor should be consulted in the matter.

6. It will be the duty of the County Committee to select centres at which the lectures and classes will be held and to appoint a local committee, with an honorary secretary, at each centre, who should select the school and arrange for the hiring, lighting, and warming of the room in which the lectures will be delivered. In selecting centres the County Committee should have particular regard to districts in which lectures or classes may not have been held in previous years.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody, of all equipment provided.

7. Instead of delivering lectures the Instructor may conduct practical classes, in accordance with the provisions of Scheme No. 12. In no case should lectures be given after the end of the hatching season.

8. Lectures and classes should be arranged, wherever possible, to be given in schoolrooms or other suitable public rooms, and should be held in rural centres only. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those meetings which are held in the rural parts of a county, especially in districts where the greatest number of those interested in poultry-keeping is to be found. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, and should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout the circuit. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of instruction. Each lecture should be followed by a discussion, during which persons interested in poultry-keeping will be invited to ask questions relative to the subject. Where a course of lectures has already been given a new syllabus should be presented.

9. In addition to the preliminary inspection of applicants' premises, the Instructor will be required, after the stations have been reported by her to be fully stocked, to make, before the 31st May, at least two complete inspections of all hen and duck stations, and two inspections of all goose and turkey stations in the county. The Instructor shall submit at the end of each week to the County Committee and to the Department on the prescribed form a report on all stations inspected during that week.

#### DISTRIBUTION OF SITTINGS OF EGGS OF PURE BREEDS.

##### *Hen and Duck Stations.*

10. In counties where instruction in poultry-keeping has been provided, the Department are prepared to sanction a limited number of premiums of £5 each being awarded to approved applicants, selected by the County Committee, who distribute during the season at least 80 sittings of eggs

(twelve eggs to count as a sitting): those who distribute less will be paid in proportion to the number distributed. No maximum number of sittings to be distributed is prescribed, but owners of stations must continue selling eggs at the fixed price until 31st May. The owner may set eggs for his own use, but such sittings will not count towards a premium. Applicants must agree to comply with the following conditions:—

(1.) To keep only one pure breed of hens, or one pure breed of hens and one pure breed of ducks, for station purposes.

(2.) To sell or destroy any existing fowl on the premises of which the Instructor or the Department may disapprove, and not to bring on the premises, during the period for the distribution of eggs, fowl of any description without the sanction of the Instructor and of the Department.

(3.) To dispose of the male birds in use at the station during 1909-10 and to replace these with others unrelated to the stock at the station.

(4.) When a premium is claimed for hens alone, to keep not less than thirty or more than sixty birds, approved by the Instructor and the Department, of the selected breed. If the premium is claimed in respect of hens and ducks, not less than five ducks and twenty-five hens must be kept, or ten ducks and twenty hens, but the total number of birds to be kept at any one station should not exceed sixty. At least one cock or cockerel must be kept for every ten hens or pullets, and one drake for every five or six ducks.

(5.) To replace each year at least one-third of the hens with early hatched pullets.

(6.) To provide proper housing where such does not already exist. The size of run for any flock of birds will require to be at least twenty square yards per bird.

(7.) To feed and care the birds in such a manner as the Instructor and the Department may require, and not to dispose of the birds until after the 31st May.

(8.) To supply, during the season specified in par. (10.) below, sittings of eggs from the station birds to any person in the county at 1s. per dozen (the purchaser to bear the cost of package and carriage), and to replace infertile eggs that are returned within one month from the date on which they were sent out.

In special cases the Department may sanction a higher price than the above, provided the County Committee show sufficient reasons for so doing.

(9.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(10.) To enter in a special book provided by the County Committee a daily record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for, and in any case must be returned to the Secretary of the County Committee at the end of the distributing season, which will commence on the 1st December, 1910, and terminate on the 31st May, 1911. (See Clause 18.)

(11.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—While in exceptional circumstances the Department may allow other pure breeds to be kept on the same premises if they are satisfied that the selected person, houses, runs, birds, etc., are suitable, and may even permit a limited number of cross-bred hens to be kept, provided no male birds are allowed to run with the cross-bred hens, such permission will be given only where the Instructor and the Department are satisfied as to the efficiency of the arrangements made by the station holder to keep all such stock properly isolated from the station birds.]

Any infringement of the above rules may entail the cancellation of the premium.

11. The following breeds of hens and ducks will alone be recognised :—

#### HENS.

##### *Laying Breeds.*

Black Minorcas. White Leghorns. Brown Leghorns.

##### *General Purpose Breeds.*

Plymouth Rocks (Barred variety recommended). Orpingtons (Buff and White recommended). White Wyandottes. Salmon Faverolles. Sussex.

#### DUCKS.

Indian Runner. Aylesbury. Pekin. Rouen.

12. An additional grant of 50 per cent. of the actual cost, but in no case exceeding £2, may be made to selected persons who provide themselves for the purpose of this scheme with portable wooden fowl-houses approved by the Department. This will apply only to persons who are taking up the scheme in 1910-11 for the first time. No grant will be made in respect of improvements in an existing house, and if a new house is obtained it must be portable.

#### GEESE STATIONS.

13. A limited number of premiums of £2 each may be offered to persons selected by the County Committee, and approved by the Department, who will undertake to comply with the following conditions :—

(1.) To keep on the premises only one pen of birds, viz.—a gander and three geese of the Embden breed, which have been approved by the Instructor and the Department.

(2.) No gander shall be retained for more than six years at any one station. A gander which has been for six years at one station must be replaced by a bird unrelated to the stock at the station.

(3.) To sell *not less than 12 sittings of eggs* to residents in the county : those who distribute less will be paid in proportion to the number distributed. No maximum number of sittings to be distributed is prescribed, but owners of station must continue selling eggs at the fixed price until May 31st, 1911.

(4.) To sell the eggs at 1s. 6d. per sitting—three eggs to count as a sitting—(purchaser to defray the cost of package and carriage where necessary). Each applicant to be restricted to one sitting.

(5.) To provide proper housing where such does not already exist. The birds to have access to suitable shelter at all times, and to be hand-fed, when a sufficient amount of natural food is not obtainable, in such a way as the Instructor and the Department may require.

[NOTE.—Only those applicants on whose premises there is an adequate supply of water will be approved as keepers of geese stations.]

(6.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(7.) To enter in a special book provided by the County Committee a daily record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for, and in any case must be returned to the Secretary of the County Committee at the end of the distributing season, which will commence on 1st January and terminate on 31st May, 1911.

(8.) To permit the Instructor and the Department to inspect the birds at any time.

NOTE.—In special cases the Department may sanction the keeping of a second pen of geese provided the birds are up to premium standard, are effectively isolated from the station birds and are properly housed and fed.

[Only one premium, however, will be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.



## TURKEY STATIONS.

14. A limited number of premiums of £2 each may be offered to persons selected by the County Committee and approved by the Department who will undertake to comply with the following conditions:—

(1.) To keep one pure bred American Bronze stock turkey cock, approved by the Instructor and the Department, for the service of turkey hens, the property of residents in the county. The approved turkey cock shall serve, at a fee of 6d. per service, twenty hens other than those belonging to the owner of the turkey cock. If a smaller number is served, the premium will be proportionately reduced. After twenty hens have been served, the owner may refuse to allow the bird to serve more or may charge a higher fee. The stock birds must be not less than the following weights on 1st January, 1911, viz.:—Cockerels, 22 lbs.; adult birds, 28 lbs. Birds more than three years old are not eligible for premiums.

[A station holder under the 1909-10 scheme will not be eligible to hold a premium under the 1910-11 scheme unless the bird kept in 1910-11 is exchanged or a new bird purchased. A premium may be granted for a turkey cock selected in 1909-10, provided the bird is suitable in every respect, and is located at a different station either in the same or in another county.]

(2.) To provide such housing accommodation and to feed and care the bird in such a manner as the Instructor and the Department may require.

(3.) To enter in a special book, provided by the County Committee, a daily record of services. This book must be sent to the Secretary of the County Committee or to the Department when required, and in any case must be returned to the Secretary of the County Committee at the end of the service season which will terminate on 31st May, 1911.

(4.) To permit the Instructor and the Department to inspect the birds at any time.

[NOTE.—In exceptional cases the Department may approve of a second turkey cock being kept, provided it is up to premium standard; but only one premium will be allowed.]

Any infringement of the above rules may entail the cancellation of the premium.

## GENERAL.

15. An applicant will be eligible for one premium only in respect of each of the following:—(a) hens or hens and ducks. (b) geese, and (c) turkeys, but the same person may hold premiums for (a), (b) and (c). No premium, however, will be given for ducks alone.

16. (1.) As soon as the Instructor has been appointed and the number of premiums proposed to be awarded has been approved by the Department, the County Committee shall invite applications from persons in the county who already possess or are willing to purchase pens of the approved pure breeds of hens, hens and ducks, or geese, as the case may be, or to keep one pure-bred turkey cock, and who are prepared to comply with the above conditions. When these applications have been received the Instructor shall, without delay, inspect and report to the County Committee as to the number of suitable applicants. The names of the applicants selected by the County Committee, with full particulars as to the breeds, number of birds, and housing, should then be submitted, on the prescribed form, for the approval of the Department, who may thereupon further inspect the selected farms, and submit a list of those of which they approve to the County Committee for their final selection.

(2.) The County Committee may make such regulations as they think fit with regard to requiring applicants for premiums to deposit with each application a sum not exceeding 10s. Such deposit to be refunded if the appli-

cant is not selected by the Committee, or being selected complies with all the conditions of the county scheme. The deposit to be forfeited to the County Committee in the event of the applicant when selected failing to comply with all the conditions of the county scheme.

17. The Department will not consider applications from a county in respect of premiums under this scheme later than 1st December, 1910.

County Committees who intend to adopt this scheme should have all arrangements completed prior to the 1st January, 1911.

18. (1.) Not later than 7th June, 1911, the selected applicants for premiums must forward to the Secretary of the County Committee the record books referred to in Clauses 10 (10), 13 (7), and 14 (3), accompanied by a certificate that the entries in these books are correct, and that all the conditions of this scheme have been complied with.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary of the County Committee will be notified that payment may be made by the Committee of the premiums or portions thereof payable under this scheme.

(3.) A premium not applied for by the 7th June, 1911, shall be considered as having lapsed.

19. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

20. In all matters of dispute relating to this scheme the decision of the Department shall be final.

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#### Scheme No. 12.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### TUTORIAL AND PRACTICAL CLASSES IN POULTRY-KEEPING, 1910-11.

1. The Department are prepared to approve the holding of Tutorial and Practical Classes in Poultry-Keeping by the Itinerant Instructors in Poultry-Keeping in counties where circumstances justify the introduction of this form of instruction.

2. Classes will be held at each selected centre for at least two but not more than four weeks, and daily instruction of not less than two hours' duration will be given.

At least eight pupils must be enrolled at each centre, but not more than eighteen pupils will be admitted to any class.

Pupils must undertake to attend regularly, and no person under fifteen years of age will be enrolled on the register.

3. It will be the duty of the Instructor—

(a.) To give instruction in the subjects suggested in the syllabus, but the Instructor should consider the requirements of the district as well as the season of the year and select subjects accordingly. Each day's work should commence with a discourse and demonstration, the pupils taking notes, and should be followed by practical instruction. Diagrams, models, and blackboard illustrations should be used as far as possible.

The pupils should be required to take as full notes as possible; these should be carefully checked and corrected by the Instructor *in her spare time*.

At the end of the week the Instructor should question the class on the week's work, and should hold a short examination at the end of the course.

(b.) To visit poultry runs every day in her spare time, especially at the homes of pupils, and advise as to requirements. The general

conditions of management should be gone into, mistakes pointed out, and improvements suggested. The fowl-houses should be examined, and such points as accommodation, ventilation, lighting, perches, limewashing, etc., attended to where necessary. The preparation and mixing of the food might also be carried out under the direction of the Instructor.

(c.) To arrange for the distribution of the Department's leaflets applicable to the subjects dealt with at the classes.

(d.) To keep a register of attendance of the pupils, recording therein such particulars as the Department may require.

(e.) To furnish a report weekly to the Department and to the County Committee on the prescribed form.

4. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee with an honorary secretary, who will be responsible for the local arrangements necessary and for a good and regular attendance of pupils.

The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed in the neighbourhood of the centre.

The centres should be selected in rural districts, and large towns and villages should be avoided.

No centre should be selected unless the County Committee have good reason to believe that the instruction provided will be availed of to the fullest extent.

It will be the duty of the Secretary of the County Committee to keep an inventory, and be responsible for the custody, of all equipment provided.

## SYLLABUS.

### (a.) SUGGESTED SUBJECTS FOR DISCOURSE AND DEMONSTRATION.

I. *Breeds best suited to district*.—(1) for egg production; (2) for table; value of first crosses for both purposes. Describe points of (1) a good layer, (2) a good table fowl; and illustrate the difference between each.

II. *Ducks, Geese, and Turkeys*, their rearing and management.

III. *Breeding and selection of stock*.—Enumerate advantages of pure breeds over mongrel fowls, and point out the value of selection for desired points, e.g., laying strains, etc. Use of trap nests. (Illustrate by diagrams and blackboard.)

IV. *Houses and Housing*.—Suitable houses, illustrated by models or blackboard sketches. Colony system; other systems; principles of housing, such as situation, shelter, materials to use, size of house, ventilation, light, flooring, fittings (nest boxes and perches); care of houses; importance of cleanliness; danger from parasites.

V. *Chicken Rearing*.—Conditions necessary for success. When to hatch for (1) stock birds; (2) egg production; (3) market. Describe simple hatching box and how it might be made. Provide a hatching box and hen. Demonstrate on making the nest and setting the hen. Mention precaution necessary against rats and insect vermin. Explain the importance of fresh ground for chickens.

Describe best kind of coop and how to use it. (Illustrate by model or blackboard.)

VI. *Feeding*.—Importance of suitable foods. Best food; how to use them for (1) rearing and fattening table poultry; (2) egg production. Give approximate quantities and prices of foods; show samples of feeding stuffs, grits, etc. Special attention should be paid to suitable foods of a simple character within the reach of poultry-keepers in the district.

VII. *Selecting and Testing Hatching Eggs*.—Kind of eggs to select; demonstrate with suitable and unsuitable eggs. Conditions necessary to obtain fertile eggs; describe a fertile, infertile, and addled egg (blackboard illustrations and specimens). Explain the use of testing, demonstrating with a hand tester.

VIII. *Marketing of Eggs*.—Necessary conditions, with special reference to size, cleanliness, freshness; production of winter eggs.

IX. *Egg Preservation for Home Use*.—Best preservatives and how to use them. Demonstrate with butter, vaseline, or water-glass.

X. *Fattening*.—Different methods; value of trough feeding; use of pellets; importance of observing proper methods as to fasting, killing, plucking, stubbing, singeing, shaping, cooling, packing, grading.

XI. *Simple Accounts and Egg Records*.—Explain advantages and refer to books, see page 6 of scheme.

XII. *Diseases*.—Explain symptoms, cause and treatment of the more common diseases, making special mention of the importance of fresh ground, isolation, etc., as a means of prevention.

XIII. *Composition of an Egg*.—Description of its composition; the use and association of the various parts in the formation of the chicken.

#### *Suggested Demonstrations.*

(1.) Dissection of two birds, showing and explaining the effect and appearance between the organs of a healthy and diseased specimen. (2.) Dissection of a chicken with gapes, explaining symptoms, cause, preventive, and curative treatment, and demonstrating the effect of fumigation. (3.) Dissection of an over-fat hen, showing and explaining effect of accumulated fat on the egg-producing and other organs. (4.) Careful removal of the digestive organs of a fowl, explaining in detail their uses. (5.) Simple operations; the use of simple medicines. (6.) Making of simple appliances such as feeding troughs, drinking vessels, nest boxes, chicken coops, hatching boxes, etc.

#### (5.)—PRACTICAL WORK IN WHICH PUPILS SHOULD TAKE PART.

*Fattening*.—Hand cramming; the use of pellets.

*Preparing Poultry for Table and Market*.—Killing, plucking, stubbing, singeing, shaping by tying down, packing.

*Trussing*.—Chickens and ducks.

*Packing sittings of eggs and small boxes of fresh eggs for private trade.*

*Examination of organs of a bird*.—Specimens of different organs of a bird to be kept after trussing, pupils to identify same, and to explain their functions.

#### TABLE OF WORK—EXAMPLE.

##### FIRST WEEK.

##### MONDAY.—(Opening Day.)

Previous to hour of class the Instructor should visit the appointed place to unpack outfit and make final arrangements.

*Discourse and Demonstration.*

Fattening (†No. X.).—Killing, plucking, etc., and shaping fowl.

*Practical Work.*

Killing, plucking, etc., shaping (tying down).

##### TUESDAY.—*Discourse and Demonstration.*

Breeds best suited to district (†I.); Trussing.

*Practical Work.*

Trussing.

##### WEDNESDAY.—*Discourse and Demonstration.*

Feeding (†VI.); Dissection of digestive organs.

*Practical Work.*

(1.) Killing, plucking, etc., shaping (tying down).

(2.) Pellet Cramming.

##### THURSDAY.—*Discourse and Demonstration.*

Houses and Housing (†IV.). Packing dead birds for market.

† These numbers refer to syllabus.

*Practical Work.*

- (1.) Packing birds for market.
- (2.) Trussing.
- (3.) Pellet Cramming.

FRIDAY.—*Discourse and Demonstration.*

Marketing of eggs (†VIII.); Packing sittings of eggs and small boxes of fresh eggs for private trade.

*Practical Work.*

Packing sittings of eggs and fresh eggs for private trade.

*Class Work.*

Questions to class on week's work explaining correction of notes.

SATURDAY.—Visiting poultry yards of pupils and others in the district, and giving practical advice according to requirements.

## SECOND WEEK.

MONDAY.—*Discourse and Demonstration.*

Chicken rearing (†V.); Demonstration on making nest and setting hen.

*Practical Work.*

- (1.) Killing, plucking, shaping.
- (2.) Packing sittings of eggs and fresh eggs for private trade.

TUESDAY.—*Discourse and Demonstration.*

Selecting and testing hatching eggs (†VII.); showing and explaining use of hand tester.

*Practical Work.*

- (1.) Trussing.
- (2.) Pellet Cramming.

WEDNESDAY.—*Discourse and Demonstration.*

Demonstration; Dissection of two birds, showing the difference in appearance between the organs of a healthy and of a diseased specimen, and explaining the effect of the disease.

*Practical Work.*

Killing, plucking, shaping (tying down), etc.

THURSDAY.—*Discourse and Demonstration.*

Demonstration; Dissection of a chicken affected with gapes; explaining symptoms, cause, preventive and curative treatment, and demonstrating the effect of fumigation.

*Practical Work.*

Trussing.

*Class Work.*

Keeping of accounts.

FRIDAY.—*Discourse and Demonstration.*

Egg preservation for home use, showing how to use one or more preservatives (†IX.).

*Class Work.*

Résumé of work of course; Examination.

SATURDAY.—Packing outfit and moving to new centre.

## BOOKS.

Specimen account books are supplied to the Instructor, and each pupil should be recommended to procure one from Messrs. Dollard & Co., Printinghouse, Dublin. Price 6d., postage extra.

Specimen books of Egg Record forms for the keeping of monthly returns are supplied to the Instructor, and additional copies will be forwarded to pupils who are willing to undertake the keeping of records.

† These numbers refer to syllabus.

## TUTORIAL AND PRACTICAL CLASSES.

*List of Articles required for Outfit, with approximate cost.*

	s. d.	£ s. d.
* 2 Folding Tables, . . . . . @ 9 9	0 19 6	
* 8 Trussing Boards, . . . . . @ 0 10	0 6 8	
8 Trussing Needles (8" or 10"), . . . . . @ 0 2	0 1 4	
* 8 Trussing Knives, . . . . . @ 1 0	0 8 0	
1 Hone for Sharpening, . . . . .	0 0 6	
* 8 Stabbing Knives, . . . . . @ 0 7	0 4 8	
2 Choppers, . . . . . @ 0 8	0 1 4	
16 Swab Cloths, . . . . . @ 0 3	0 4 0	
* 1 Fattening Pen (Indoor), . . . . .	0 5 3	
* 1 Blackboard (36" × 30"), . . . . .	0 5 0	
Strong, Painted (36" × 24" size, 4s. 6d.).		
* 12 Farm Produce Boxes (No. 1), . . . . . @ 0 1	0 1 0	
* 4 Farm Produce Boxes (No. 3), . . . . . @ 0 3	0 1 0	
* 2 Folding coops for treatment of sick birds, . . . . . @ 2 6	0 5 0	
* 2 Zinc Buckets, . . . . . @ 1 9	0 3 6	
* 1 Large Scrubbing Brush, . . . . .	0 1 0	
* 1 Small Scrubbing Brush, . . . . .	0 0 6	
* 6 Tin Porringers (2-pint size), . . . . . @ 0 2½	0 1 3	
* 6 Plucking Baskets, . . . . . @ 2 0	0 12 0	
8 Enamel Plates, . . . . . @ 0 5	0 3 4	
1 Spring Hook Weighing Machine (40 lbs.), (56 lb. size, 7s.).	0 4 9	
7 Sheets of Millboard (30" × 20") (for mounting illustrations), . . . . . @ 0 6½	0 3 9½	
4 Do. (15" × 15") do., . . . . . @ 0 4	0 1 4	
1 Egg Tester, fitted with black diaphragms for three sizes of eggs; post free, . . . . .	0 1 3	
1 Patent Egg Testing Lamp; carriage paid, . . . . .	0 3 0	

Messrs. George Perry and Co., Ltd., Camden-row, Dublin, are prepared to supply the abovementioned articles at the prices stated, on the following conditions:—

Cost of packing the above, . . . . . 0 4 0

(Part outfit in proportion.)

All f.o.r. Dublin, prices net.

Six days required to execute orders. A written requisition, signed by person authorised to purchase, must be furnished.

Contractors will not hold themselves responsible for delay in delivery of any articles on the list not of their own manufacture, nor will they give the option of any article supplied to order being returned.

The Knives can also be procured from the Irish Cutlery Manufacturing Co., Ltd., 17 Merchants' Quay, Dublin, and the Egg Tester and Lamp from Messrs. Hughes Bros., 22 Dawson-street, Dublin.

1 Dissecting Case, containing 2 metal-handle scalpels, 1 scissors,  
1 forceps; post free, . . . . . 0 7 9

This case may be obtained from Messrs. Fannin and Co.,  
41 Grafton Street, Dublin.

SUNDRIES, viz. :—

Samples of foods and grits, with tin boxes (½ lb. size); wood wool; fumigating powder and bellows for "Gapes"; small supply of drugs, viz. :—Carbolic Acid, Friar's Balsam, Permanganate of Potash, Powdered Sulphur, Epsom Salts, Chlorodyne, Insect Powder, etc., estimated price, . . . . . 1 5 0

These articles might be purchased according to requirements; it should be possible to obtain them locally.

£6 15 8

\* Irish Manufacture.

Arrangements have been made for the supply of the following illustrations, which will be issued direct on application to the Department :—

1 Set of Poultry Illustrations (Seven Plates).

1 Set of Anatomy Illustrations (Four Plates).

(Each illustration to be mounted on millboard by the Instructor.)

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Scheme No. 13.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

INSTRUCTION IN BUTTER-MAKING.

1910-11.

1. The Department are prepared to approve the appointment of at least one Instructor in Butter-making in each county in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which she is a native or in which she permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1911, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of an Instructor will terminate as a matter of course on her marriage.

4. The instruction shall take the form of daily lessons on dairying, and practical work in which the pupils shall take part. Each course shall extend for a period of not less than two, and not more than four weeks. Not more than twelve pupils should be admitted to each class. Pupils must undertake to attend regularly.

It is desirable that pupils should be at least 15 years of age.

5. On the first day of visiting each centre the Instructor should give a public lecture and demonstration, and during the remainder of the course at that centre should conduct a class daily in which pupils only will take part, but which shall be open to the public.

The Instructor shall keep a register of attendance of the pupils, recording therein such particulars as may be required by the Department.

It will also be the duty of the Instructor to visit home dairies in the county and to give necessary advice; to give, where possible during that part of the day not required for class work, demonstrations in the making of butter, by means of the equipment actually in use in the dairies visited; to reply to letters from persons seeking information on dairying; to report to the Department and to the County Committee on the progress of her work either weekly or otherwise as may be required; and generally to give her whole time to the work of the Committee.

6. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local Committee, with an honorary secretary, who will be responsible for the local

arrangements necessary for the proper carrying out of the work, and who will be required to comply with the annexed conditions. The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed in the neighbourhood of the centre. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each class.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme.

7. To avoid expense and to ensure success these classes should be held, as far as possible, in schoolrooms or other suitable buildings in rural centres. Unless in exceptional circumstances no class should be held in a large village or town, or near a creamery.

The County Committee are alone responsible for the selection of centres and arrangement of lectures. It is desirable, however, that the Instructor should be consulted in the matter.

8. No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

#### CONDITIONS REQUIRED OF LOCAL COMMITTEES.

I. To secure premises suitable for a working dairy, if possible not less than 25 feet by 18 feet, or other dimensions affording similar floor space. Either a public room, schoolroom, or barn with good floor, would be suitable for the purpose.

II. To secure a sufficient supply of good water.

III. To provide on the premises means of heating at least fifteen gallons of water at one time, for use in cleaning utensils, &c.

After the opening day at each centre about three gallons of milk and six gallons of cream will be required for each day's work. NOTE.—

The pupils should bring sufficient milk or cream for the use of the class.

IV. To guarantee not less than six and not more than twelve pupils to attend on each of the days over which the course of instruction extends.

V. To arrange for the carriage of utensils from one centre to another. The weight of the utensils is usually from 25 to 30 cwts., and they are somewhat bulky.

The Department recommend the following list of utensils for a travelling dairy school attended by twelve pupils:—

	Approximate Cost.	
	£	s. d.
6 End-over-End Churns, at £3, . . . . .	18	0 0
6 Butter Workers, at 37s. 6d., . . . . .	11	5 0
6 Butter Boards, at 2s., . . . . .	0	12 0
4 Large Butter Boards, at 3s. 6d., . . . . .	0	14 0
6 Scoops, at 1s., . . . . .	0	6 0
6 Sieves, at 2s. 6d., . . . . .	0	15 0
6 Pairs Scotch Hands, at 2s. 6d., . . . . .	0	15 0
6 Squeegees, at 1s., . . . . .	0	6 0
6 Scrubbing Brushes, at 1s., . . . . .	0	6 0
6 Thermometers, at 1s. 6d., . . . . .	0	9 0
6 White Enamelled Buckets, at 5s. 6d., . . . . .	1	13 0
6 Iron Buckets, at 4s. 6d., . . . . .	1	7 0
4 Shallow Tins (Cream), at 4s., . . . . .	0	16 0
1 Pair Scales, . . . . .	0	19 0



1 Set Iron Weights (7, 4, 2, 1, $\frac{1}{2}$ , & $\frac{1}{4}$ lb.),	0	4	6
1 Set Brass Weights (2, 1, $\frac{1}{2}$ , & $\frac{1}{4}$ oz.);	0	5	6
1 Set Creamometers,	0	6	6
1 Lactometer,	0	1	6
1 Gerber Butter-fat Tester (2 Bottles), about	2	10	0
1 2-Quart Measure,	0	2	6
4 Quart Measures, at 1s. 9d.,	0	7	0
4 Pint Measures, at 1s. 3d.,	0	5	0
2 Skimmers, at 8d.,	0	1	4
1 Hand Separator (17 gallons per hour),	7	10	0
1 Portable Boiler (15 gallons),	2	14	0
	£52 10 10		

The above equipment allows one churn, one butter worker, and one set of the smaller utensils for two students. A dash churn may be included in the equipment when the County Committee deem it desirable.

### LOANS FOR THE PURCHASE OF HAND SEPARATORS.

Particulars of the conditions on which these loans are made to farmers occupying holdings valued at £50 and under may be obtained on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin.

Letters of application so addressed need not be stamped.

Scheme No. 14.

*Special attention is directed to Clause 9.*

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### INSTRUCTION IN HORTICULTURE AND THE MANAGEMENT OF BEES, 1910-11.

1. The Department are prepared to approve the appointment of at least one Instructor in Horticulture and Beekeeping for each County in Ireland, provided the County Committee can secure the services of a person or persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he is a native, or in which he permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not, unless in exceptional circumstances, exceed £2 per week, in addition to expenses of locomotion, which include second or third-class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1911, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

4. It will be the duty of the Instructor to give demonstrations and, if approved, to deliver lectures on horticultural subjects, such as soils, manures, vegetable, fruit, and flower cultivation, plant diseases, and insect pests—to visit gardens and orchards, and give practical demonstrations on spraying, planting, pruning and grafting of fruit trees—to conduct such

experiments and other demonstrations as may be approved by the Department—to select suitable land for this purpose—to supervise the sowing of the seeds and manures, and the keeping of the plots free from weeds—to give instruction in the principles and practice of modern bee-keeping—to deal with diseases of bees, plants, and trees—to advise farmers, cottagers, and others interested in land, as to the planting of trees, &c., for shelter and ornament—to reply to letters from those seeking his advice on horticultural and bee-keeping subjects—to give practical outdoor demonstrations to students attending winter agricultural classes—to report to the Department and to the County Committee on the progress of his work either weekly or otherwise, as may be required; and generally to give his whole time to the work and to do all in his power to further the interests of horticulture and bee-keeping in the county.

He will be required to carry out such duties as may be assigned to him in connection with any Orders issued by the Department under the Destructive Insects and Pests Acts, 1877 and 1907. Further, it will be his duty to report to the County Committee the names and addresses of persons in the possession of bushes or trees on which he has detected or has reasonable grounds for suspecting the existence of any disease or pest referred to in such Orders.

5. The Instructor shall report to the County Committee on all cases of foul brood which may come under his notice, and shall act as Inspector of the County Committee for the purposes of the Bee Pest Prevention (Ireland) Regulations, 1909.

6. For the purposes of this scheme the county should be divided into circuits and the Instructor shall give outdoor demonstrations for three or four weeks in each circuit. The Instructor shall visit gardens, orchards and apiaries in the district, and give such information on practical subjects as the circumstances of the case may suggest. In cases, however, where an Instructor may be employed to give instruction in bee-keeping only it will not be necessary to divide the county into circuits. In such instances demonstrations can be arranged at centres from which applications have been made through the Secretary of the County Committee for his services.

The County Committee are alone responsible for the selection of centres for demonstrations. It is desirable, however, that the Instructor should be consulted in the matter.

7. It will be the duty of the County Committee to select centres at which demonstrations shall be given.

In selecting centres the County Committee should have particular regard to districts in which lectures and demonstrations may not have been given in previous years.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish detailed statements of such expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the custody, of all equipment provided for the purposes of this scheme.

8. Where it is considered desirable, with the approval of the Department, to arrange for lectures, the lectures should be given in schoolrooms or other suitable public rooms in the evenings, and should be held in rural centres. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those lectures which are given in the rural parts of a county. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, and should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout their district. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of lectures. Each lecture should be followed by a discussion,

during which persons interested in horticulture and bee-keeping will be invited to ask questions.

9. The County Committee may purchase fruit, forest and other trees, shrubs, or plants, in bulk, and resell them at cost price, including carriage, to farmers and other residents in the county. As, however, it has come to the knowledge of the Department that trees and plants infested with disease have been imported into Ireland, it will be necessary for County Committees who intend to put this clause into operation to invite from nurserymen tenders for the supply of trees, &c., to be guaranteed free from disease, and before acceptance to submit the tenders to the Department for examination on or before 1st day of January in each year. The Department may, if they think it advisable, inspect the trees, &c., that are offered for sale, and satisfy themselves that the trees, &c., are suitable and free from disease.

10. In each circuit one demonstration plot may be provisionally selected for the purpose of growing vegetables, fruit, and flowers, and showing improved methods of cultivation, but no new plots shall be selected in a county if a sufficient number of suitable plots established in previous years are being continued.

Before sanctioning the establishment of a new plot the Department must be satisfied as to the suitability of the site, &c. (See Clause 11.)

Demonstration plots under this scheme may not be established in connection with National or other primary schools or teachers' residences.

(a.) In counties in which a sufficient number of suitable plots, approved by the Department under this scheme, already exist, the Committee shall make provision for the continuance of the plots at a cost not to exceed £1 per plot. (See List A.)

It is not desirable to continue the grant to any plot for more than three years.

All requisite labour must be given gratuitously by the owner of the plot, who will be entitled to the produce.

(b.) In cases where it is proposed to establish new plots the Department will require compliance with the following regulations:—

(1) Plots must not exceed a quarter of an acre in extent, or be less than one-eighth of an acre (quarter-acre plots are recommended).

(2) No new plot shall be established save at a convenient centre adjacent to a main road.

(3) Plots should be selected on sites which are properly fenced.

(4) The aspect of each plot and the nature of the soil must be suitable for vegetable growing and fruit cultivation. Necessary improvements, such as fencing and drainage, must be carried out, and when required farm-yard manure must be supplied, by the plot owner without expense to the Committee.

(5) The owner of the plot must sign an undertaking on the prescribed form to continue the plot for three years.

(6) The necessary labour must be given gratuitously by the persons providing the plots—the produce to be their property.

The cost of trees, &c., required for planting a new plot must not exceed £2. (See List B.)

(NOTE.—The Department recommend that allotments attached to labourers' cottages should be selected for the establishment of new demonstration plots subject to the foregoing conditions.)

(c.) The County Committee shall forward to the Department on the prescribed form, not later than the 1st of January, a list of demonstration plots selected for the year, accompanied, in the case of new plots, by a detailed report from the Instructor.

11. The Department's approval in writing must be obtained before any expense is incurred in connection with the establishment of a plot.

12. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

## LIST A.

RECOMMENDED FOR HORTICULTURAL DEMONSTRATION PLOTS  
ALREADY ESTABLISHED.

Variety.	<i>Vegetables.</i>				Quantity.	Price s. d.
Peas, .. .. .	..	..	..	..	1 qt.	2 0
Cabbage, Early, ..	..	..	..	..	1 oz.	0 9
— Savoy, ..	..	..	..	..	1 oz.	0 4
Brussels Sprouts, ..	..	..	..	..	1 oz.	0 6
Broccoli, ..	..	..	..	..	1 oz.	0 9
Carrots, ..	..	..	..	..	1 oz.	0 6
Parsnips, ..	..	..	..	..	1 oz.	0 6
Onions, Spring, ..	..	..	..	..	1 oz.	1 0
— Autumn, ..	..	..	..	..	1 oz.	0 8
Leek, ..	..	..	..	..	1 oz.	0 6
Lettuce, ..	..	..	..	..	1 oz.	0 6
<i>Flowers.</i>						
Sweet Pea, .	..	..	..	..	1 packet	1 0
Mignonette, .	..	..	..	..	1 "	0 3
Candituft, ..	..	..	..	..	1 "	0 3
Wallflower, .	..	..	..	..	1 "	0 3
Nasturtium, ..	..	..	..	..	1 "	0 3
						10 0
<i>Artificial Manures.</i>						
Sulphate of Potash, .	..	..	..	..	3 st.	10 0
Nitrate of Soda, ..	..	..	..	..	3 st.	
Superphosphate, ..	..	..	..	..	4 st.	
Total						£1 0 0

## LIST B.

RECOMMENDED FOR NEW HORTICULTURAL DEMONSTRATION PLOTS.

Variety.	<i>Fruit and Vegetables.</i>				Quantity.	Price s. d.
Apple Trees, ..	..	..	..	..	6	6 0
Black Currants, ..	..	..	..	..	6	2 0
Gooseberries, ..	..	..	..	..	6	2 0
Rhubarb, ..	..	..	..	..	3	2 0
Potatoes, Early, ..	..	..	..	..	4 st.	4 0
— Late, ..	..	..	..	..	4 st.	4 0
Peas, ..	..	..	..	..	1 qt.	2 0
Cabbage, Early, ..	..	..	..	..	1 oz.	0 9
— Savoy, ..	..	..	..	..	1 oz.	0 4
Broccoli, ..	..	..	..	..	1 oz.	0 9
Brussels Sprouts, ..	..	..	..	..	1 oz.	0 6
Carrots, ..	..	..	..	..	1 oz.	0 6
Parsnips, ..	..	..	..	..	1 oz.	0 6
Onion, Spring, ..	..	..	..	..	1 oz.	1 0
— Autumn, ..	..	..	..	..	1 oz.	0 8
Leek, ..	..	..	..	..	1 oz.	0 6
Lettuce, ..	..	..	..	..	1 oz.	0 6

	Flowers.	Quantity.	Price.
			s. d.
Sweet Pea, . . . . .	.. .. .	1 packet, ..	1 0
Mignonette, . . . . .	.. .. .	1 " ..	0 3
Candituff, . . . . .	.. .. .	1 " ..	0 3
Wallflower, . . . . .	.. .. .	1 " ..	0 3
Nasturtium, . . . . .	.. .. .	1 " ..	0 3
			<hr/> £1 10 0
<i>Artificial Manures.</i>			
Sulphate of Potash, . . . . .	.. .. .	3 st. ..	} 10 0
Nitrate of Soda, . . . . .	.. .. .	3 st. ..	
Superphosphate, . . . . .	.. .. .	4 st. ..	
		Total, .	<hr/> £2 0 0

Scheme No. 15.  
[REVISED.]

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### SCHEME FOR ENCOURAGING IMPROVEMENT IN THE MANAGEMENT OF CREAMERIES AND AUXILIARY CREAMERIES.

#### GENERAL REGULATIONS.

1. The object of this Scheme is to encourage improvement in the manufacture and marketing of dairy produce by providing facilities for obtaining advice on technical and business methods affecting the management of creameries and auxiliary creameries.

2. For the purposes of this Scheme:—

(a.) The term "creamery" shall mean premises adapted and utilised for the manufacture of butter in commercial quantities from cream separated by centrifugal force from the commingled milk supplies of a number of cowkeepers: Provided that the premises are not, and do not require to be, registered under the Sale of Food and Drugs Acts, 1875 to 1907.

The manufacture of butter in commercial quantities shall mean that on every day on which milk or cream is treated at the premises the quantity so dealt with is sufficient to make at least 56 lbs. of butter; but the Department may in their discretion regard as a creamery, premises at which the quantity of milk or cream dealt with on any one or more days is insufficient to make 56 lbs. of butter.

(b.) The term "auxiliary creamery" shall mean any premises adapted and utilised for the separation of cream by centrifugal force from the commingled milk supplies of a number of cowkeepers but not utilised for the manufacture of butter: Provided that the premises are not, and do not require to be, registered under the Sale of Food and Drugs Acts, 1875 to 1907.

(c.) The term "creamery butter" shall mean butter which has not been blended nor reworked and which has been made in a creamery from cream separated by centrifugal force from the commingled milk supplies of a number of cowkeepers.

(d.) The term "year" shall mean the twelve months commencing on the 1st January and terminating on 31st December.

3. Any creamery or auxiliary creamery, from which application (on Form A 175, signed by the proprietor or by the president or chairman of the society or company owning the creamery or auxiliary creamery, as the case may be, and by the manager thereof) is duly received and accepted by the

Department, will be inserted on the list of creameries and auxiliary creameries which are visited by the Department's Instructors in Dairying. Provided that a creamery at which cream or milk is received from one or more auxiliary creameries which are under the control of the proprietors of the creamery will not be entered or retained on the list in question unless all the auxiliary creameries referred to are at the same time entered or retained on the list. On the occasion of each visit all necessary advice will be afforded on matters relating to creamery management, and a report embodying the Instructor's observations on the condition and working of the creamery or auxiliary creamery visited will be entered in a special report book to be supplied by the Department, and to be carefully preserved at the creamery or auxiliary creamery, as the case may be, and produced for the inspection of the Department's officers when so required. Supplementary reports will be furnished, as may be thought fit, in special circumstances, e.g., when suggestions for specifications for machinery and sketch-plans or notes for alterations in buildings are required.

4. A creamery or auxiliary creamery from which application on Form A 175 is accepted will be visited by the Department's Instructors until notification is given to the contrary on either side. A creamery or auxiliary creamery on the list of those receiving visits from the Instructors at the date of publication of the Scheme will be considered as entered for visits under this Scheme, unless notification to the contrary is received.

5. Applications (on Form A. 174, signed by the proprietor or by the president or chairman of the society or company owning the creamery or auxiliary creamery, as the case may be, or by the manager thereof) may be made for visits of the Instructors for any special purposes, e.g., the preparation of sketch-plans, and notes for the construction or alteration of buildings, or suggestions for specifications for machinery. It is, however, to be understood that, except in cases of special urgency, applications of this nature cannot receive prior attention to those made on Form A 175.

Applications on Form A 174 will be considered only from creameries and auxiliary creameries included in the list of those visited by the Instructors in connection with applications on Form A 175.

6. The premises and methods of creameries and auxiliary creameries entered on the list of those visited by the Department's Instructors must be open at all reasonable times to inspection by the Department.

7. The Department may, without assigning any reason, refuse to send an Instructor to any creamery or auxiliary creamery.

8. The Department will publish from time to time a List containing the names and addresses (with such other particulars as may be thought fit) of those creameries and auxiliary creameries entered for inspection which satisfy the Department in the following matters:—

- (1.) That proper care has been taken by the proprietors and staff to secure that the milk or cream dealt with at the creamery or auxiliary creamery is supplied in a clean condition and in clean vessels.
- (2.) That proper care has been taken by the manager and staff to maintain cleanliness and order in the management and condition of the creamery or auxiliary creamery.
- (3.) That the book-keeping and business methods are efficient.
- (4.) That the buildings and equipment are in good condition and adequate for the business.
- \*(5.) That suitable packages are used for butter, and in the case of 56 lb. boxes and 112 lb. casks that they conform with the standard specifications (see Leaflet No. 60).
- \*(6.) That apprentices and pupils (if any) receive efficient training and instruction.
- \*(7.) That, if the creamery is included in the latest published List, butter is forwarded to each of the Surprise Butter Inspections held by the Department after the date of publication.

\* Not applicable in the case of auxiliary creameries.

[Failure to forward duly a package of butter from a creamery to any one Surprise Butter Inspection will, except in circumstances which in the opinion of the Department afford a satisfactory excuse for such failure, disqualify the creamery for inclusion in the next List to be published by the Department.]

#### SURPRISE BUTTER INSPECTIONS.

9. On a number of occasions at the option of the Department a telegram may be forwarded to any creamery on the latest published List of creameries (see Clause 8), requesting the recipient to "send butter to-day to Department's Surprise Inspection." Provided that a creamery which is removed from the list of those visited by the Department's Inspectors in Dairying or which fails to comply with clauses 8 (1), 8 (2), 8 (3), 8 (5), or 8 (6) of this scheme shall not be entitled to participate in the Inspections.

The butter shall be sent to an address in Dublin or elsewhere, which will be communicated to the Manager of the creamery.

10. Between the 1st October and 1st May the telegrams will be issued on Mondays, Wednesdays and Fridays only.

11. The butter at each Inspection will be judged one or more times by one or more persons appointed by the Department, and in one or more sections according as the Department may consider desirable.

12. The following scale of points will be adopted as the basis in judging the butter sent to the Inspections :—

Flavour, . . . . .	60 points.
Texture, . . . . .	30 "
Colour, . . . . .	5 "
†Packing and finish, . . . . .	5 "
<hr/>	
Total, . . . . .	100 points.

†See Clause 8 (5).

A schedule giving in such form as the Department may decide, the results of the judging of the butter received from each creamery participating in the Inspection will be issued after each Inspection to all the participating creameries. In addition notes of any particular defect or defects observed in any lot of butter may be communicated to the manufacturer for the purpose of indicating the points in which improvement is especially required. If so desired, an Instructor in Dairying will be directed to visit the creamery for the purpose of assisting the Manager to remedy any defect which can be most satisfactorily dealt with by means of such assistance.

13. The following conditions must be complied with in respect of each lot of butter forwarded to the Inspections :—

- (1.) The butter forwarded must be a sample of the ordinary creamery butter made at the creamery on the day on which the telegram is received, from cream separated on a preceding working day, and must be forwarded by passenger train, carriage paid, on the day on which the telegram is received.
- (2.) The quantity of butter forwarded must be either 56 lbs. or 112 lbs. packed in a box, keg or kiel, similar to those in regular use at the creamery. In special circumstances the Department may, however, in the case of Inspections held between 1st October and 1st May, accept a smaller quantity of butter.
- (3.) Excepting the direction labels supplied by the Department for use during the current year, there must be no mark or label in or on the butter which might indicate its origin.
- (4.) The carrying company's receipt must be transmitted to the Department by post on the day on which the butter is forwarded. Unless the carrying company's receipt is received at the office of the Department by the ordinary postal delivery on the morning of the day following that on which the telegram is despatched, the butter will be liable to be disqualified.

Failure to comply with any one of the foregoing conditions will render butter in respect of which such failure takes place liable to be disqualified from participating in the Inspection to which it is forwarded.

14. The butter forwarded for the Inspections will be paid for by the Department at the end of the year. The prices given will be based on the current market rates prevailing for the various classes of butter at the dates on which the telegrams are despatched, and shall be determined by the judges.

Provided that any butter which reaches the Department in an unsatisfactory condition or which develops defects which, in the opinion of the Department should be seen by the manufacturer, may be returned to him at his own risk, and will not be paid for.

15. The Department may, without assigning any reason, refuse to accept for the Inspections butter from any creamery.

16. In all cases of dispute in matters connected with any part of this Scheme the decision of the Department shall be final.

### LOCAL SURPRISE BUTTER INSPECTIONS.

The Department having decided to discontinue the awarding of prizes at their Surprise Butter Inspections\* are prepared instead to devote portion of their funds to encouraging Local Surprise Butter Inspections of a similar kind, but carried out by creamery proprietors and managers themselves. All creameries in the district, whether taking part in the Department's Scheme or not, will be entitled to take part in the Local Inspections subject to compliance with the prescribed conditions.

Creamery proprietors and managers desirous of establishing a system of Local Surprise Butter Inspections in any district in Ireland should first ascertain the number of creameries from which butter would be regularly sent to the Local Inspections. A Local Committee representative of the proprietors and managers of all the creameries which would participate in the Local Inspections should then be formed. This Committee should be entrusted with the carrying out of all the arrangements in connection with the Inspections. The Department will be prepared to consider an application from a duly constituted Committee of this kind for a grant towards the expenses of holding Local Surprise Butter Inspections.

The grant to be made by the Department will be subject to the following conditions :—

- (1.) That a sufficient number of creameries participate regularly in the Inspections.
- (2.) That all the regulations made by the Local Committee are submitted to the Department for approval and are approved by the Department.
- (3.) That a proportion of the cost of the Inspections is contributed by the proprietors of participating creameries.
- (4.) That the Local Committee accepts complete responsibility for the proper carrying out of the Inspections.
- (5.) That the Inspections are carried out strictly in accordance with the regulations as prescribed by the Local Committee and approved by the Department.

### WINTER COURSES OF INSTRUCTION.

During the winter a course of instruction in the subjects of examination for Certificates will be provided. At the close of this course a limited number of the best students will be afforded facilities for learning the practice of creamery management during the summer in a selected creamery. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery.

\* Hitherto described as " Surprise Butter Competitions."



Attendance at the annual course of instruction for students of agriculture at the Albert Agricultural College, Glasnevin, is recommended as a preliminary general training for young men who may intend to become creamery managers.

#### SCHOLARSHIPS FOR STUDENTS OF CREAMERY MANAGEMENT.

One or more scholarships, tenable at the Royal College of Science, Dublin, may be offered yearly to students who desire to specialise in subjects relating to the management of creameries. Particulars as to the date, place, and subjects of examination will be published by the Department in due course.

#### CERTIFICATES.

An examination will be held annually in March in technical subjects as applied to creamery management, and a certificate of having passed the examination will be awarded to successful competitors. The subjects of the examination are set forth in Appendix II. Due notice of time and place will be given to applicants.

A special certificate designated the "creamery manager's certificate" will be granted to candidates who having passed the examination in technical knowledge satisfy the Department with regard to their practical ability as creamery managers.

Applications for admission to the examination should be made not later than 15th February, on Form A 137, to be obtained from the Department, and must be accompanied by a deposit of £1, which will be returned if the candidate presents himself for examination, or if his application is not accepted.

*The Regulations of this Scheme are subject to revision from time to time.*

*The Appendices and List of Creameries and Auxiliary Creameries published by the Department in connection with this Scheme are printed separately, and may be obtained free of charge, and post free, on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin. Letters of application so addressed need not be stamped.*

January 1911.

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Scheme No. 16.

#### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### SCHEME OF LOANS FOR THE ERECTION OF VILLAGE HALLS.

The Department are prepared to consider a limited number of applications for loans to aid in the erection and equipment of new buildings, or the adaptation of existing buildings, to be used as Village Halls in rural parts of Ireland, subject to the following conditions:—

1. Application must be made on the prescribed form, which can be obtained free from the Department.

2. The amount of any one loan to be advanced by the Department under this scheme shall not exceed two-thirds of the approved cost—the balance to be raised locally by means of private subscriptions or otherwise.

The loan shall be issued in such sums and at such times as the Department may decide.

3. A Committee of not less than three or more than nine solvent rate-payers resident in the district shall be formed. The buildings and equipment shall be vested in this Committee who shall declare a Trust that the

said buildings and equipment are held by them as Trustees for public purposes, i.e., for the promotion of "the purposes of agriculture and rural industries as defined by the Agriculture and Technical Instruction (Ireland) Act, 1899," and shall make provision to the satisfaction of the Department for the appointment of new Trustees pursuant to these conditions.

4. The Trustees when applying for a loan shall furnish the Department with a statement setting forth the special object in view in providing a Hall, together with such details as to the site, particulars of tenure, &c., as the Department may require.

5. The Trustees shall not take any steps to begin the work of building or to incur any liability until the Department have signified in writing their approval of the design, plans, and estimate of the cost of erection, &c., of the proposed Hall.

6. Before the amount of the loan is issued the Department will require to be satisfied that the sum contributed locally has been actually collected and lodged in bank.

7. The sum advanced by the Department together with the money contributed locally for the purpose shall be expended by the Trustees on the building and equipment of the Hall in the manner approved by the Department.

8. The Department must be satisfied that the Trustees have made adequate provision for the permanent and proper upkeep of the buildings and equipment.

9. The sum advanced by the Department shall be duly charged as a first charge on the land and buildings. In addition, the Trustees shall enter into a Bond to repay the amount of the loan in not more than ten equal annual instalments payable on the first day of June in each year with interest at the rate of two-and-a-half per cent. per annum on the outstanding balance; provided, however, that the Trustees shall be at liberty to repay the full amount or the balance of the loan at any earlier period. The Bond and Deed of Charge referred to in this clause, and the Declaration of Trust referred to in clause 3 shall be in such form, and shall contain such provisions as the Department may prescribe.

10. The Trustees shall have the sole management of the Hall; shall pay all the rent and other charges thereon, and shall keep the building and furniture adequately insured, and in proper repair, to the satisfaction of the Department.

11. It shall be a condition of the loan that the Committee or Committees of Agriculture and Technical Instruction for the county in which the building is situated, and the Department shall have prior claim for the use of the Hall in connection with the purposes of any approved County Scheme. On all occasions when the Hall is required either by a County Committee or by the Department the Trustees shall, at their own cost, have the Hall sufficiently lighted and warmed.

Subject to the foregoing the Trustees may permit the Hall to be used for entertainments or for any other purpose of which they may approve.

12. The Trustees may fix a scale of fees for use of the Hall by a County Committee or the Department under the preceding clause, or by any other person or body for a purpose approved by the Trustees—provided that such scale so far as it refers to the use of the Hall by a County Committee or by the Department for the purposes of Agriculture and Technical Instruction, shall first be submitted to the Department for their approval in writing. All fees so received shall be applied by the Trustees in repayment of the loan, and for the purpose of defraying or assisting to defray expenditure in connection with the rent of the site of Hall and the upkeep of the buildings and equipment.

13. The Trustees shall keep accurate accounts of all receipts and expenditure in connection with the buildings and equipment, and shall permit same to be inspected at any time by the Department's Officers.

14. The Department shall have the right at all times to visit, inspect and examine the buildings and equipment.

15. If prior to the repayment of the loan the Trustees or any of them, or any Trustee appointed subsequent to the issuing of the loan dies, or is desirous of being discharged from the Trust, or goes or resides out of Ireland for a continuous period of twelve calendar months, and neglects or refuses to carry out the Trust or becomes unable to execute the Trust, the surviving or continuing Trustees or Trustee shall, subject to the Department's approval, appoint a new Trustee or Trustees, and in case that any such surviving or continuing Trustee shall neglect or refuse to exercise power of appointment, the appointment shall be made by the Department.

16. In all matters relating to loans under this Scheme, and to the regulations of the Scheme the decision of the Department shall be in every respect final and conclusive.

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Scheme No. 17.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SCHEME OF LOANS FOR THE ERECTION OF  
FENCING IN COUNTIES CONTAINING  
CONGESTED DISTRICTS.

The Department are prepared to consider a limited number of applications for loans for the erection of wire fencing on the lands of small occupiers resident in counties containing congested districts, subject to the conditions mentioned below.

These loans are not intended for occupiers who can afford, or may reasonably be expected to pay, cash for the required fencing, nor for cases in which, having regard to the position of the occupier and the extent of the proposed fencing, application for a loan should be made to the Board of Works. The object of these loans is to encourage small occupiers to fence in their arable land or to fence off mountain grazing so as to permit of arable land being properly cropped and laid down with grass and clover seeds.

1. An application for a loan must be made on the prescribed form, which can be obtained free from the Department.

2. No application for a loan will be considered unless in cases where the Department are satisfied that each applicant is a person of very small means.

3. Save in exceptional circumstances no application for a loan will be considered from any farmer whose gross Poor Law Valuation exceeds £20.

4. In no case shall a loan be granted to an individual for a smaller sum than £5 or a larger amount than £35. When the loan is made to two or more persons the loan shall not exceed £35 for each person who is a party to it.

5. Loans will be granted for the purpose of erecting wire fencing

(a) for the boundary fence of a holding;

(b) for separating arable land from mountain grazing or similar rough pasture; and

(c) for the internal fencing on the farms of applicants where wire fencing is the most suitable for the purpose.

6. Subject to the provisions of Clause 7, loans of £5 up to and including £15 shall be repayable within five years; and loans exceeding £15 and not exceeding £35 shall be repayable within ten years. In the case of a joint loan to two or more persons, the Department will decide whether the loan shall be repayable in five or ten years as the case may be.

7. In the case of loans to individuals, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount of the loan in ten (or twenty, as the case may be) equal half-

yearly instalments on the 1st January and the 1st July in each year, together with interest at the rate of 3 per cent. per annum on the outstanding balance. In the case of joint loans to two or more persons the security shall be in the form of a joint and several bond.

For example, a loan of £10 granted on the 1st January, 1907, will be repayable as follows:—

(Instalments of £1 with interest on £10 for six months at 3 per cent.)			
£1 : 3 : 0 on 1st July, 1907			
£1 : 2 : 9 „ 1st January, 1908	( do.	9	do.
£1 : 2 : 4 „ 1st July, 1908	( do.	8	do.
£1 : 2 : 1 „ 1st January, 1909	( do.	7	do.
£1 : 1 : 9 „ 1st July, 1909	( do.	6	do.
£1 : 1 : 6 „ 1st January, 1910	( do.	5	do.
£1 : 1 : 2 „ 1st July, 1910	( do.	4	do.
£1 : 0 : 11 „ 1st January, 1911	( do.	3	do.
£1 : 0 : 7 „ 1st July, 1911	( do.	2	do.
£1 : 0 : 4 „ 1st January, 1912	( do.	1	do.

8. The person to whom a loan is granted shall be at liberty to repay the full amount or the balance of the loan, with interest, at any earlier period than that provided for in the form of guarantee.

9. When satisfied that the approved applicant for the loan has made proper preparation for proceeding with the work, the Department will supply the necessary fencing materials as well as the services of a foreman to superintend, for a limited period, the erection of the fencing. The farmer on whose lands the fencing is to be erected must at his own expense provide such other labour as may be required.

10. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

11. The decision of the Department in all matters relating to these loans shall be final and conclusive.

Scheme No. 18.

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### SCHEME OF LOANS FOR THE PURCHASE OF HAND SEPARATORS.

The Department are prepared to consider a limited number of applications from farmers for loans for the purchase of hand separators, subject to the conditions mentioned below. Preference will be given to those applications which are recommended by the County Committees of Agriculture for the counties from which they are received. The Department invite the co-operation of the various County Committees in making known the advantages of the scheme to persons in their respective counties who are engaged in home dairying, and they will rely on the Committees to recommend only those applicants who are deserving of such assistance and who may be safely depended upon to repay the loans if granted.

1. Application must be made on the prescribed form, which may be obtained free from the Department or from the Secretary of the County Committee.

2. The Department will need to be satisfied in each case that the applicant is a person of small means, and one who could not reasonably be expected to pay cash for the required separator.

3. No loan will be granted to a person the aggregate tenement valuation of whose holding or holdings, wherever situated and for which he is rated, exceeds £50, or for the purchase of a separator whose capacity exceeds 45 gallons per hour.

4. No loan will be made save for the purchase of a separator of a price and pattern approved by the Department. The cost of erecting the separator on the applicant's premises will not necessarily be included in the price.

5. Before the loan is granted the approved applicant must—

(1.) Lodge with the Department one-fourth of the purchase price, together with sixpence to cover stamp duty, etc.; and

(2.) With two solvent sureties, to be approved of by the Department, guarantee in such form as the Department may require, repayment to the Department of the amount which shall be advanced by them, viz., three-fourths of the purchase price, in three equal annual instalments, payable on the 1st April in each year, together with interest at the rate of three per cent. per annum on the outstanding balance.

6. The separator shall be purchased through the Department, who will pay the vendor the agreed on price as soon as the applicant has notified the Department that he has taken delivery of the machine.

7. The approved applicant shall, during the period from the delivery of the separator until the payment of the last instalment of the purchase-money to the Department, maintain the separator in good order and repair, and shall pay and defray all costs of repairs and of providing new parts of, and expenses in relation to, the said separator, and the applicant shall not, during the above period, sell or dispose of the separator without the consent in writing of the Department.

8. The separator shall remain the property of the Department until all the instalments of principal and interest are paid off.

9. The Department reserve the right to brand each separator and to inspect it from time to time.

10. The Department also reserve the right to refuse any application for a loan without assigning any reason for such refusal.

11. The decision of the Department in all matters relating to these loans shall be final.

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#### Scheme No. 19.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### LOANS FOR THE PURCHASE OF HORSE SPRAYING MACHINES.

The Department are prepared to grant a limited number of loans for the purchase of horse spraying machines to farmers who are recommended by the County Committees of Agriculture of the counties in which they reside. The Department will rely on the Committee to recommend only those applicants who are deserving of such assistance, and who may be safely depended upon to repay the loans if granted.

The conditions under which the Department are willing to advance these loans are as follows:—

(1.) Application must be made on the prescribed Form A 245, which may be obtained free from the Department or from the Secretary of the County Committee. Applications must in all cases be transmitted to the Department through the Secretary of the County Committee.

(2.) No loan will be granted save for the purchase of a horse sprayer of a price and pattern approved by the Department.

(3.) Before the loan is granted the approved applicant must—

(a) Lodge with the Department one-fourth of the purchase-money, together with sixpence to cover stamp duty, &c., and

(b) With two solvent sureties to be approved by the Department, guarantee in such form as the Department may require, repayment to the Department of the amount which shall be advanced by them, viz.,

three-fourths of the approved purchase price, in three equal annual instalments, payable on the 1st May in each year, together with interest at the rate of 3 per cent. per annum on the outstanding balance.

(4.) The machine shall be purchased through the Department, who will pay the vendor the agreed on price as soon as the applicant has taken delivery of the machine.

(5.) The approved applicant shall during the period from the delivery of the sprayer until the payment of the last instalment of the purchase-money to the Department, maintain the machine in good order and repair, and shall pay and defray all costs of repairs and of providing new parts of, and expenses in relation to, the said sprayer, and the applicant shall not, during the above period, sell or dispose of the sprayer without the consent in writing of the Department.

(6.) The sprayer shall remain the property of the Department until the instalments of principal and interest are paid off.

(7.) The applicant shall agree to hire the machine to farmers in his district, on such conditions as may be prescribed by the County Committee with the approval of the Department.

(8.) The decision of the Department in all matters relating to these loans shall be final.

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Scheme No. 20.

#### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### SCHEME FOR ENCOURAGING IMPROVEMENT IN THE DAIRY CATTLE OF IRELAND THROUGH THE SELECTION AND REGISTRATION OF COWS.

Dairying, as well as the raising of store cattle, is one of the principal branches of agriculture pursued in this country. It is, accordingly, of importance that the milking properties of Irish cattle should be preserved and improved. In dairy herds the yield and quality of milk given by each cow largely determine whether the animal realises a profit or entails a loss to the owner; consequently it is essential that farmers should know exactly the quantity and quality of milk which each cow yields per annum. At the same time, as young cattle are a considerable source of revenue, it is desirable that the good milking cow should be of the type likely to produce a calf which will be of value for both beef and milk. With the object of encouraging the improvement of Irish dairy cattle, the Department have decided to put into operation the following scheme.

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1. The Department will keep a register of dairy cattle in which cows and their produce may be entered, subject to the provisions of this scheme. The inspection of cows with a view to entry on this register will be carried out by the Department.

#### INDIVIDUAL OWNERS.

2. Owners of good cross-bred shorthorn, and pure-bred dairy cows are invited to apply on the prescribed form for the inspection of their stock by the Department as regards:—

- (a) General merit (i.e., appearance), and
- (b) Milk yield.

Only cows of a distinct and well-defined type are eligible.

3. Applications for the inspection of cows must be lodged with the Department on the prescribed form on or before the 31st August each year, and must be accompanied by a fee of 2s. 6d. in respect of each cow entered for inspection.

As soon as all applications have been received, the Department will give due notice to each cow owner of the centre fixed for inspection of his animals.

Cow owners presenting animals for inspection will be refunded all fees paid by them except in respect of cows which are provisionally selected for registration under Clause 4.

4. Cows will be provisionally selected, on the ground of general merit, at local shows, local exhibitions, or at such other convenient centres as may be determined by the Department.

With regard to inspections elsewhere than at local shows, it should be understood that the Department, save in exceptional cases, cannot undertake to send an Inspector to any district unless at least ten cows from such district are offered for inspection.

All animals provisionally selected for general merit under this scheme will be suitably marked by the Department for future identification.

#### *Provisionally Selected Cows.*

5. Owners of cows provisionally selected under Clause 4, are required to observe the following conditions:—

- (a.) To provide themselves with an approved type of machine for weighing milk;
- (b.) To weigh the milk yielded by each cow on every seventh day during the entire milking period (the exact day of the week for each herd will be fixed by the Department), and to record the same on the form provided for the purpose;
- (c.) To permit their herds to be inspected by the Department at any time; and
- (d.) To afford the Department every facility for examining the milk records and for taking samples of the milk of each selected animal.

6. The records kept under Clause 5 (b.) shall be forwarded to the Department when required. This will, usually, be at the end of the year following that in which cows were provisionally selected.

7. As soon as possible after the receipt of these records, the Department will notify to each owner of a provisionally selected cow their decision as to the registration or rejection of the animal.

8. If the owner of a provisionally selected cow complies with the requirements of Clause 11, and if the cow is subsequently accepted for entry in the Department's register, particulars of the progeny with regard to which the necessary certificates have been furnished prior to the registration of the dam, will be duly recorded in the register, and such progeny will be entitled to the same benefits as if calved after the registration of the dam.

#### **COW TESTING ASSOCIATIONS.**

9. The following regulations apply to Cow Testing Associations only:—

(L) A cow testing association formed for the purpose of this scheme may be composed either of members of existing agricultural and dairy societies or of farmers combining specially for the purpose, who will undertake to comply with the following conditions:—

- (a.) The association shall secure an entry of as many herds of milking cows as possible, each member of the association being required to enter all his cows.
- (b.) The members shall have the milk of each cow weighed on every seventh day (the exact day of the week being fixed by the association). The morning and evening milk shall be weighed, and recorded separately on the form prescribed for the purpose.
- (c.) After every weighing a sample of each cow's milk must be taken and preserved until the end of the month, when the composite sample for the month shall be tested for butter-fat.

- (d.) The association shall appoint a secretary, whose duties shall be :
  - (i.) to transfer the weekly records to the "monthly summary" book provided for the purpose ; (ii.) to ensure that the monthly butter-fat tests are regularly carried out, and (iii.) to record the results of these tests in the monthly summary book.
- (e.) The record sheets, monthly summary book, list of members of the association, etc., must be open to inspection by the Department at any time.

(II.) When the Department are satisfied that a cow testing association has been formed, and that suitable arrangements have been made to comply with the foregoing requirements, they will be prepared to supply the society with the necessary number of byre record sheets and monthly summary books.

(III.) If the number of cows for which records are being kept exceeds fifty, the Department will (in a limited number of cases) be prepared for at least one year to make a grant to the secretary at the rate of one penny per cow per month towards the cost of testing the milk for butter-fat.

(IV.) The Department will be prepared to inspect all cows which have given, during the milking period covered by the records, a yield of not less than 500 gallons of milk with an average butter-fat percentage of 3.5, and to accept for entry in the Registry of Dairy Cattle, on payment of a fee of 2s. 6d. for each cow, all animals of good conformation and well-defined type.

10. Applications in regard to proposed cow testing associations will be dealt with in the order in which they are received.

#### *Registered Cows.*

11. The owner of each registered cow must comply with the following conditions :—

- (a.) To have the animal served by a registered dairy bull or a pure-bred bull of her own type. These bulls must be passed by the Department as eligible for a premium.  
[Persons who intend eventually to enter the progeny of registered cows in the herd books of their respective breeds must have the cows served by pure-bred bulls. N.B.—A registered dairy bull may be pure-bred.]
- (b.) To furnish on the prescribed form a certificate of service to the Department within three months from the date of such service ;
- (c.) To furnish to the Department on the prescribed form, within seven days from the date of birth, particulars regarding sex, colour, markings, etc., of each calf produced by a registered cow ; and
- (d.) To keep on the prescribed form a record of the breeding, date of birth, etc., of produce, for the purposes of future registration.

12. The female progeny from the service of registered cows by bulls approved under Clause 11 (a) will be eligible for inspection at or about two years old, at a fee 2s. 6d. each.

13. In cases where the conditions of Clause 11 have been fully complied with, male progeny are eligible for inspection with a view to provisional selection for premiums under the Department's Cattle Breeding Scheme, within the limits of age specified therein, and, if so selected, will be entered in the Register of Dairy Cattle as "Registered Dairy Bulls."

14. When a registered cow or her calf has been disposed of, the Department must be notified of the fact within fourteen days of the disposal of the animal, and at the same time advised of the name and address of the new owner.

The death of a registered cow or her calf must also be notified to the Department within fourteen days of the death of the animal.

15. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

*July, 1911.*



DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

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LOANS FOR THE REPAIR AND EQUIPMENT OF MEAL MILLS,  
KILNS FOR DRYING, &c.

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The Department are prepared to consider a limited number of applications for loans to aid in the repair and equipment of existing mills, etc., or the adaptation of existing buildings to be used as such, subject to the following conditions:—

1. The application must be made on the prescribed form, which can be obtained from the Department.

2. The amount to be advanced by the Department under this Scheme shall not exceed two-thirds of the approved cost.

3. The applicant shall furnish the Department with a statement setting forth the special object in view in providing the mill, together with such details as to site, particulars of tenure, etc., as the Department may require.

4. The applicant shall not take any steps to begin the work of repairing, equipping or erecting the building, or incur any liability until the Department have signified in writing their approval of the plans, estimate of cost of repair or of additional buildings, and machinery and equipment, etc.

5. The sum advanced shall be expended in a manner approved of by the Department.

6. The sum advanced shall be duly charged as a first charge on the building, machinery and equipment. In addition, the applicant shall, together with two solvent sureties approved by the Department, enter into a bond to repay the loan in not more than ten equal annual instalments, payable on the 1st day of January in each year, with interest at the rate of 3 per cent., the first instalment to be repayable, with interest calculated from the date of advance, on the second gale day following the date of said advance. Provided, however, that the borrower shall be at liberty to pay the full amount of the balance of the loan at any earlier period, together with the interest to date.

7. During the period the loan is outstanding, the buildings, machinery, and equipment shall be kept in proper repair, and adequately insured, by the applicant at his own expense. The receipts for insurance premiums shall be submitted to the Department when required.

8. The Department shall have the right at all reasonable times to inspect the buildings, books, machinery and equipment.

9. The applicant shall undertake to furnish such reports and to keep such accounts in connection with the working of the mill as the Department may require, and shall submit same to the Department when requested to do so.

10. In all matters relating to loans under this scheme, and to the regulations of the scheme, the decision of the Department shall be in every respect final and conclusive.

In the event of an instalment of principal and interest being in arrear for more than four weeks, the Department shall be at liberty to act in any one or more of the following ways at their discretion:—

(a.) to recover with costs the amount of the instalment of principal and interest from the applicant and his sureties;

(b.) to recover with costs the outstanding balance of the loan, with interest, from the applicant and his sureties;

(c.) to take possession of the mill buildings, machinery and equipment, and to sell same in satisfaction of so much of the loan as may not be recovered from the applicant and his sureties.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

VETERINARY DISPENSARIES IN CONGESTED DISTRICTS.

1. The Department will establish a limited number of Veterinary Dispensaries in the poorer parts of the nine congested counties. For this purpose they propose to subsidise a number of Veterinary Surgeons, whose headquarters are within reasonable distance of the districts to be benefited.

2. In fixing the subsidy to be paid Veterinary Surgeons for their services the Department will take into consideration the poverty of the district, the difficulties of travelling, and whether the district is or is not regularly visited by the Veterinary Surgeon in the ordinary course of his practice.

3. Subsidised Veterinary Surgeons will be required to give advice to all *bona-fide* farmers under £10 valuation and resident in congested districts who seek it either at a dispensary or at the Veterinary Surgeon's headquarters.

4. The term "*bona-fide* farmer" is to be understood to mean a person who derives his means of living mainly from the cultivation of his holding. Each applicant must, if requested to do so, produce evidence that his total valuation does not exceed £10.

5. Subsidised Veterinary Surgeons will be required to attend at certain centres at least fortnightly, or as may be arranged, on days and at hours fixed by the Department, and advertised by them in the district.

6. Subsidised Veterinary Surgeons must also attend when required at the residence of farmers entitled to the benefits of this scheme.

7. The following scale of fees will apply:—

Advice at headquarters or dispensary, 1s. per case.

Simple operations at headquarters or dispensary, 1s. per case.

Severe operations at headquarters or dispensary, 2s. 6d. per case for persons whose valuation is £5 or under, and 5s. per case for persons whose valuation exceeds £5 but does not exceed £10.

Inoculation at headquarters or dispensary, 1s. per case.

Attendance at farmer's residence, 1s. per £ of valuation, provided the minimum fee is not less than 2s. 6d.

Double fees may be charged after sunset.

8. Medicines supplied by the Veterinary Surgeon to persons entitled to the benefits of this scheme shall be charged for in addition at reasonable prices.

9. Subsidised Veterinary Surgeons will be required to keep at their headquarters and at each dispensary a record of the number and the nature of the cases treated under this scheme, the fees charged therefor, and the amount charged for any medicines supplied.

10. The Department reserve the right to ask each Veterinary Surgeon subsidised under this scheme to give public lectures on veterinary hygiene at a fee to be arranged.

11. The work of each subsidised officer under this scheme shall be subject to inspection by the Department from time to time.

12. The subsidy will be paid at the end of each quarter.

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SCHEME FOR ENCOURAGING THE BREEDING OF IRISH  
DRAUGHT HORSES.

1. The objects of this scheme are to increase the number and to improve the quality of Irish Draught Horses.

2. The type of animal it is desired to encourage is one free from all trace of English or Scotch cart horse blood, standing not less than 15.2 hands high, with short, clean, flat legs, well set joints and good feet, good head and rein, well laid back shoulders, and displaying throughout its conformation a sufficiency of power to warrant it doing general farm and harness work. The action should be free and light stepping.

3. At centres and on dates of which due notice will be given, shows of mares of the Irish Draught type will be held by the Department. Subject to the provisions of this scheme, mares selected at these shows as sound and suitable for breeding will be awarded prizes of £5 (Five Pounds) each.

4. Selected mares must be entered on the prescribed form by their owners in a Register to be called the Irish Draught Horse Register, which will be kept by the Department. The forms for the purpose may be obtained free on application to the Department.

5. The Department will issue annually a Register of Stallions of the Irish Draught type, to be selected in accordance with the regulations for the registration of stallions under the Department's general Horse Breeding Scheme.

6. Fillies out of mares entered in the Register and got by a registered Irish Draught stallion will, when two years old, be eligible for entry in that Register provided they are passed by the Department as sound and suitable.

A limited number of such registered fillies, selected by the Department and retained for service by an approved registered Irish Draught stallion, will be awarded, on such conditions as the Department may prescribe, a premium of £20 per annum for not more than five seasons provided a live foal resulting from such service during the preceding year is produced during each of the five seasons in question.

7. Colts out of mares entered in the Register and got by registered Irish Draught stallions will, on inspection as two-year olds, be purchased by the Department for a sum of not less than £200 each provided they are passed by the Department as sound and suitable for registration.

8. The Department will, on the production of the necessary vouchers, refund the amount of the service fee and the cost of sending for service by a registered Irish Draught stallion each mare entered in the Register.

9. In future a portion of the Department's grant in respect of agricultural shows will be ear-marked for classes of mares entered in the Register, and for the progeny of such mares.

10. The decision of the Department in all matters relating to this scheme shall be final.

*December, 1910.*

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## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

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### REVISED SCHEME OF AGRICULTURAL EXPERIMENTS.

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These experiments are intended only for those counties in which an agricultural instructor has been appointed for the purpose of personally attending to all the details of selecting and measuring the land, sowing the seed, applying the manure, weighing the crops, and tabulating and writing a report on the result.

Agricultural instructors should be specially careful not to undertake experiments at too many centres, as the amount of work necessary is much greater than is supposed by those who have no experience of field experiments. Demonstrations with seeds and manures may be undertaken at a much larger number of centres.

Before commencing field experiments and demonstrations, each instructor must submit to the Department his proposals for the year.

In all cases seeds and manures must be ordered by the instructor, and paid for by the County Committee.

As early as possible, after the close of the season, tabulated results of the experiments must be sent to the Department, and where these are presented in a concise form, accompanied by brief and carefully prepared notes, the same may be published by the County Committee, provided the approval of the Department has been previously obtained. All plots should be marked off at the commencement of the experiment by pegs, 3 inches square and 2½ feet long, which should be firmly driven into the ground.

These plots are intended as object lessons to farmers in the cultivation, manuring and seeding of land, and should be labelled so that an ordinary observer may be able easily to ascertain what they are intended to show. One label will suffice for each demonstration plot, but in the case of an experiment which includes several plots, a larger label stating the general character of the experiment should be erected in addition to the smaller labels, giving particulars with respect to each of the plots included in the experiment. The labels should be capable of resisting the weather.

No change must be made in any of the manurial experiments, as given below, but the instructor may include such additional plots as local conditions render advisable. In the variety tests instructors are required to include all the varieties specified in each list.

It is not absolutely necessary to have both a manurial and a variety test with any particular crop. One or other, or both, may be omitted at discretion.

#### SCHEME OF THE EXPERIMENTS.

All the experiments with the exception of those numbered II., IX., X. XIII., and XVI. (introduced in 1908), have been carried out annually since 1902, some slight modifications having been made in 1906 and 1909.

##### I.—OAT CROP (Manurial Test. Old Series).

Size of plots, one-tenth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

NO. OF PLOT.	NO. OF PLOT.
1. No manure.	(1 cwt. Sulphate of Ammonia.
2. 1 cwt. Sulphate of Ammonia.	2 cwt. Superphosphate.
3. 3 cwt. Superphosphate.	(3 cwt. Kainit.
4. (1 cwt. Sulphate of Ammonia	5 cwt. of mixture of artificials
(3 cwt. Superphosphate.	made up in same proportions
	as for Plot 5.

##### II.—OAT CROP (Manurial Test. New Series).

Size of plots, one-tenth of a statute acre.

The following kinds and quantities of manure will be used per statute acre :—

NO. OF PLOT.	NO. OF PLOT.
1. No manure.	(1 cwt. Sulphate of Ammonia.
(1 cwt. Sulphate of Ammonia.	4. 4 cwt. Superphosphate.
2. 2 cwt. Superphosphate.	(2 cwt. Kainit.
(2 cwt. Kainit.	5. (1 cwt. Sulphate of Ammonia.
(1 cwt. Sulphate of Ammonia.	3 cwt. Superphosphate.
3. 3 cwt. Superphosphate.	(3 cwt. Kainit.
(2 cwt. Kainit.	(1 cwt. Sulphate of Ammonia.
	6. 3 cwt. Superphosphate.
	(4 cwt. Kainit.

## III.—OAT CROP (Variety Test).

Size of plots not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

No. OF PLOT.	No. OF PLOT.
1. Potato.	5. Tartar King.
2. Black Tartarian.	6. Banner.
3. Abundance.	7. Any other variety.
4. Waverley.	

## IV.—BARLEY CROP (Manurial Test).

Size of plots, one-tenth of a statute acre.

The kinds and quantities of manure will be the same as for Oats (see above).

## V.—BARLEY CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

No. OF PLOT.	No. OF PLOT.
1. Archer's Chevallier.	3. Any other variety.
2. Goldthorpe.	

## VI.—WHEAT CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties may be tested :—

No. OF PLOT.	No. OF PLOT.
1. Red Fife.	4. White Queen.
2. Red Chaff White.	5. Any other variety (preferably Square-head Master).
3. White Stand-up.	

## VII.—TURNIP CROP (Manurial Test WITH Farmyard Manure. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.	No. OF PLOT.
1. No manure (size of this plot, one-fortieth of a statute acre).	6. { 15 tons Farmyard Manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
2. 20 tons Farmyard Manure.	
3. 15 tons Farmyard Manure.	
4. { 15 tons Farmyard Manure. 4 cwt. Superphosphate.	7. { 15 tons Farmyard Manure. 5 cwt. of mixture of artificials made up in same proportions as for Plot 6.
5. { 15 tons Farmyard Manure. 4 cwt. Superphosphate.	
6. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia.	

## VIII.—TURNIP CROP (Manurial Test WITHOUT Farmyard Manure. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.	No. OF PLOT.
1. No manure (size of this plot, one-fourth of a statute acre).	4. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
2. 4 cwt. Superphosphate.	
3. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia.	
	5. { 6 cwt. Superphosphate. 1½ cwt. Sulphate of Ammonia 4½ cwt. Kainit.

# IX.—TURNIP CROP (Manurial Test with Farmyard Manure. New Series).

Size of plots, one-twentieth of a statute acre.

No. OF PLOT.		No. OF PLOT.	
1.	15 tons Farmyard Manure.	5.	15 tons Farmyard Manure
2.	15 tons Farmyard Manure.	6.	4 cwt. Basic Slag.
	4 cwt. Superphosphate.		15 tons Farmyard Manure.
3.	15 tons Farmyard Manure.	7.	5 cwt. Basic Slag.
	5 cwt. Superphosphate.		15 tons Farmyard Manure.
4.	15 tons Farmyard Manure.		6 cwt. Basic Slag.
	6 cwt. Superphosphate.		

# X.—TURNIP CROP (Manurial Test without Farmyard Manure. New Series).

Size of Plots, one-twentieth of a statute acre.

No. OF PLOT.		No. OF PLOT.	
1.	4 cwt. Superphosphate.	4.	4 cwt. Basic Slag.
	1 cwt. Sulphate of Ammonia.		1 cwt. Sulphate of Ammonia.
	3 cwt. Kainit.		3 cwt. Kainit
2.	5 cwt. Superphosphate	5.	5 cwt. Basic Slag
	1 cwt. Sulphate of Ammonia.		1 cwt. Sulphate of Ammonia.
	3 cwt. Kainit.		3 cwt. Kainit.
3.	6 cwt. Superphosphate.	6.	6 cwt. Basic Slag.
	1 cwt. Sulphate of Ammonia.		1 cwt. Sulphate of Ammonia.
	3 cwt. Kainit.		3 cwt. Kainit.

# XI.—TURNIP CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested :—

## SWEDES.

No. OF PLOT.		No. OF PLOT.	
1.	Improved Purple Top.	5.	Elephant.
2.	Best of All.	6.	Incomparable Green Top
3.	Magnum Bonum.		(Garton.)
4.	Triumph.	7.	Any other variety.

## YELLOW TURNIPS.

9.	Centenary.	11.	Any other variety.
10.	Aberdeen Green Top.		

# XII.—MANGEL CROP (Manurial Test. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.		No. OF PLOT.	
1.	No manure (size of this plot, one-fortieth of a statute acre).	5.	20 tons Farmyard Manure.
2.	20 tons Farmyard Manure.		4 cwt. Superphosphate.
3.	20 tons Farmyard Manure.		2 cwt. Sulphate of Ammonia.
	4 cwt. Superphosphate.		4 cwt. Kainit.
4.	20 tons Farmyard Manure.	6.	20 tons Farmyard Manure.
	4 cwt. Superphosphate.		4 cwt. Superphosphate.
	2 cwt. Sulphate of Ammonia.		2 cwt. Sulphate of Ammonia.
			4 cwt. Salt.
		7.	20 tons Farmyard Manure.
			4 cwt. Superphosphate.
			4 cwt. Salt.
			2 cwt. Nitrate of Soda (to be applied after thinning in two dressings).

## XIII.—MANGEL CROP (Manurial Test. New Series).

Size of plots, one-twentieth of a statute acre.

No. OF PLOT.	No. OF PLOT.
1. 20 tons Farmyard Manure.	5. { 20 tons Farmyard Manure.
2. { 20 tons Farmyard Manure.	4 cwt. Superphosphate.
3 cwt. Superphosphate.	1 cwt. Sulphate of Ammonia.
2 cwt. Sulphate of Ammonia.	4 cwt. Salt.
4 cwt. Salt.	20 tons Farmyard Manure.
3. { 20 tons Farmyard Manure.	4 cwt. Superphosphate.
4 cwt. Superphosphate.	3 cwt. Sulphate of Ammonia.
2 cwt. Sulphate of Ammonia.	4 cwt. Salt.
4 cwt. Salt.	20 tons Farmyard Manure.
4. { 20 tons Farmyard Manure.	4 cwt. Superphosphate.
5 cwt. Superphosphate.	2 cwt. Sulphate of Ammonia.
2 cwt. Sulphate of Ammonia.	2 cwt. Salt.
4 cwt. Salt.	
8. { 20 tons Farmyard Manure.	
4 cwt. Superphosphate.	
2 cwt. Sulphate of Ammonia.	
6 cwt. Salt.	

## XIV.—MANGEL CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested:—

No. OF PLOT.	No. OF PLOT.
1. Yellow Globe.	4. Long Red.
2. Prize Winner.	5. Any other variety.
3. Golden Tankard.	

## XV.—POTATO CROP (Manurial Test. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre:—

No. OF PLOT.	No. OF PLOT.
1. No manure (size of this plot, one-fortieth of a statute acre).	6. { 15 tons Farmyard Manure.
2. 20 tons Farmyard Manure.	1 cwt. Sulphate of Ammonia.
3. 15 tons Farmyard Manure.	4 cwt. Superphosphate.
4. { 15 tons Farmyard Manure.	1 cwt. Muriate of Potash.
1 cwt. Sulphate of Ammonia.	5 tons Farmyard Manure.
5. { 15 tons Farmyard Manure.	1 cwt. Sulphate of Ammonia.
1 cwt. Sulphate of Ammonia.	4 cwt. Superphosphate.
4 cwt. Superphosphate.	1 cwt. Sulphate of Potash.

## XVI.—POTATO CROP (Manurial Test. New Series).

Size of plots one-twentieth of a statute acre.

No. OF PLOT.	No. OF PLOT.
1. 15 tons Farmyard Manure.	5. { 15 tons Farmyard Manure.
2. { 15 tons Farmyard Manure.	4 cwt. Superphosphate.
3 cwt. Superphosphate.	1½ cwt. Sulphate of Ammonia.
1 cwt. Sulphate of Ammonia.	1 cwt. Muriate of Potash.
1 cwt. Muriate of Potash.	15 tons Farmyard Manure.
3. { 15 tons Farmyard Manure.	4 cwt. Superphosphate.
4 cwt. Superphosphate.	2 cwt. Sulphate of Ammonia.
1 cwt. Sulphate of Ammonia.	1 cwt. Muriate of Potash.
1 cwt. Muriate of Potash.	15 tons Farmyard Manure.
4. { 15 tons Farmyard Manure.	4 cwt. Superphosphate.
5 cwt. Superphosphate.	1 cwt. Sulphate of Ammonia.
1 cwt. Sulphate of Ammonia.	1½ cwt. Muriate of Potash.
1 cwt. Muriate of Potash.	

8.  $\left\{ \begin{array}{l} 15 \text{ tons Farmyard Manure.} \\ 4 \text{ cwt. Superphosphate.} \\ 1 \text{ cwt. Sulphate of Ammonia.} \\ 2 \text{ cwt. Muriate of Potash.} \end{array} \right.$

#### XVII.—POTATO CROP (Variety Test).

Size of plots, one-twentieth of a statute acre.

The following varieties to be tested :—

<i>Maincrop.</i>	<i>Mid-Season.</i>
No. OF PLOT.	No. OF PLOT.
1. Up-to-date.	9. British Queen.
2. Duchess of Cornwall.	10. Abundance.
3. Factor.	11. Any other variety.
4. Irish Queen.	
5. Shamrock.	
6. White City.	
7. Old Champion.	
8. Any other variety.	

#### XVIII.—POTATO CROP (Boxing Test).

Size of plots, one-twentieth of a statute acre.

No. OF PLOT.

1. "Seed" boxed before December 1st.
2. Unsprouted seed.

#### XIX.—POTATO CROP (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following will be compared :—

(120 gallons of mixture to be applied per statute acre at each spraying).

No. OF PLOT.

1. Unsprayed.
2. Effect of a 1 per cent. lime or Bordeaux mixture, double application.
3. Effect of a 2 per cent. lime or Bordeaux mixture, single application.
4. Effect of a 2 per cent. lime or Bordeaux mixture, double application.
5. Effect of a 1 per cent. soda or Burgundy mixture, double application.
6. Effect of a 2 per cent. soda or Burgundy mixture, single application.
7. Effect of a 2 per cent. soda or Burgundy mixture, double application.

#### XX.—DESTRUCTION OF CHARLOCK (PRESHAUGH) AND OTHER WEEDS. (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following solutions will be tested :—

No. OF PLOT.

1. Unsprayed.
2. 50 gallons 3 per cent. Sulphate of Copper.
3. 50 gallons 4 per cent. Sulphate of Copper.

#### XXI.—MEADOW HAY CROP (Manurial Test for one year).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. OF PLOT.	No. OF PLOT.
1. No manure.	5. $\left\{ \begin{array}{l} 1 \text{ cwt. Nitrate of Soda.} \\ 2 \text{ cwt. Superphosphate.} \\ 2 \text{ cwt. Kainit.} \end{array} \right.$
2. 10 tons Farmyard Manure.	
3. 1 cwt. Nitrate of Soda.	6. $\left\{ \begin{array}{l} 1 \text{ cwt. Nitrate of Soda.} \\ 2 \text{ cwt. Superphosphate.} \\ 2 \text{ cwt. Kainit (applied not later} \end{array} \right.$
4. $\left\{ \begin{array}{l} 1 \text{ cwt. Nitrate of Soda.} \\ 2 \text{ cwt. Superphosphate.} \end{array} \right.$	than Nov. 30th).



## XXII.—IMPROVEMENT OF SECOND CLASS PASTURE.

*Improvement to be estimated by Observation.*

Size of plots, one-quarter of a statute acre.

The following kinds and quantities of manures may be used per statute acre:—

NO. OF PLOT.	NO. OF PLOT.
1. 5 cwt. Basic Slag	4. { 10 cwt. Basic Slag.
2. { 5 cwt. Basic Slag.	{ 2 cwt. Kainit.
{ 2 cwt. Kainit.	5. 5 cwt. Potassic Superphosphate.
3. 10 cwt. Basic Slag.	6. 10 cwt. Potassic Superphosphate.

## XXIII.—INFLUENCE OF SEED MIXTURES IN FORMING PASTURE.

*Land selected to be left in grass for not less than two years.*

Size of plots, one-tenth of a statute acre.

The following mixtures may be tested:—

*Plot 1.*

- 1 bushel Italian Rye Grass (22 lb. the bushel).
- $\frac{1}{2}$  bushel Perennial Rye Grass (28 lb. the bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

*Plot 2.*

- 1 bushel Perennial Rye Grass (28 lb. the bushel).
- $\frac{1}{2}$  bushel Italian Rye Grass (22 lb. the bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

*Plot 3.*

- 1 bushel Meadow Fescue (29 lb. the bushel).
- $\frac{1}{2}$  bushel Italian Rye Grass (22 lb. the bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

*Plot 4.*

- $\frac{1}{2}$  bushel Perennial Rye Grass (28 lb. the bushel).
- $\frac{1}{2}$  bushel Italian Rye Grass (22 lb. the bushel).
- 3 lb. Cocksfoot.
- 3 lb. Timothy.
- 3 lb. Meadow Fescue.
- 3 lb. Red Clover.
- 2 lb. Alsike Clover.
- 2 lb. White Clover.

*Plot 5.*

At the discretion of Instructors the following mixture (Elliot's) may be tested, but only on poor, thin land:—

- 10 lb. Cocksfoot.
- 5 lb. Meadow Fescue
- 4 lb. Tall Fescue.
- 3 lb. Tall Oat Grass.
- 1 lb. Hard Fescue.
- $\frac{1}{2}$  lb. Rough Stalked Meadow Grass.
- 1 lb. Smooth Stalked Meadow Grass.
- $\frac{1}{2}$  lb. Golden Oat Grass.
- 3 lb. Italian Rye Grass.
- 2 lb. White Clover

- 1 lb. Alsike Clover.
- 2 lb. Late Flowering Red Clover.
- 2½ lb. Kidney Vetch.
- 3 lb. Chicory.
- 8 lb. Burnet.
- 1 lb. Sheep's Parsley.
- ½ lb. Yarrow.

[N.B.—It should be carefully noted that the Superphosphate, Basic Slag, Sulphate of Potash, and Muriate of Potash used in these experiments must be High Grade. Low Grade Manures should not be used.]

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DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN,  
January, 1911.

No 24306-1910.

*Weeds and Agricultural Seeds (Ireland) Act, 1909.*

Sir,—As intimated in the circular-letter in regard to the provisions of Part I of the above Act, addressed to you by the Department in December, 1909, instructions were given to the Department's agricultural officers to sample the stocks of seed exposed for sale in the shops and stores of merchants engaged in this trade. Large numbers of samples so taken were tested for purity and germination at the Department's Seed Testing Station. The results of these tests show that at least 65% of the seeds sampled were distinctly unsatisfactory for agricultural purposes. The Department are empowered under the Act to publish, in any manner they think fit, the results of such tests, giving the names and addresses of the persons upon whose premises the samples were taken, and those of the persons from whom the seeds were stated to have been procured. They are, however, reluctant to exercise this power at the present stage, but would warn all persons engaged in the sale of agricultural seeds that, if quantities of seeds of an unsatisfactory nature continue to be sold in future seasons, they will be obliged to publish, without further notice, the results of the tests, with full particulars as above mentioned.

The Department would once more appeal to all vendors of agricultural seeds to co-operate with them in their efforts to place and maintain the trade in this country on a high level in every respect.

It is felt that much could be effected towards this end if merchants would exercise greater care in the selection of seeds and would absolutely decline to stock inferior stuff, such as old seeds remaining over from previous seasons, "mixed grass seed," the sweepings of hay lofts and stores and the cleanings derived from superior qualities of seed and sold under various names, such as "White Hay," "Brown Hay," "Common Hay," etc. It is recognised that in many districts there is a demand on the part of farmers for seed of this description owing to its apparent cheapness. The Department are endeavouring to remove this mistaken idea by demonstrating to farmers that such mixtures are really much more costly in the end than first class seed sold at a higher price, not only on account of the poor crop results obtained, but also by reason of the quantities of weed seeds contained in them.

Merchants, shopkeepers, and others will be buying their stock of seeds for the ensuing season very shortly, and the Department would strongly impress upon them the need for ensuring that they are supplied by the wholesale firms with none but the best. They should request the wholesale firm with whom they deal to supply them with a statement of the percentages of purity and germination of the seeds offered for sale. Most of the principal firms in the trade in Ireland have intimated to the Department their willingness to give such statements in respect of the seeds sold by them. Should the firm with whom you have been dealing decline to comply with

your request, the Department will supply, on application, a list of firms in this country who are prepared to give such statements to their customers.

I am,

Sir,

Your obedient Servant,

T. P. GILL,

Secretary.

To the Person or Firm  
named in the Address.

DEPARTMENT OF AGRICULTURE AND

TECHNICAL INSTRUCTION FOR IRELAND,

UPPER MERRION STREET, DUBLIN,

31st March, 1911.

No. A. 4111-11.

*Weeds and Agricultural Seeds (Ireland) Act, 1909.*

Sir,—I have to advert to the Department's circular-letter of the 10th December, 1909 (No. 24888-09), copy herewith, on the above subject, and to draw the attention of your Council to the provisions of the Act in so far as they relate to the prevention of the spread of noxious weeds. In suggesting to your Council the desirability of consenting to an Order being made by the Department under Part I of the Act, I have to state that such Orders were in force in sixteen counties last year, and that the hearty co-operation of agriculturists in the counties concerned enabled the Orders to be administered without causing any friction.

Kindly inform the Department at an early date of the decision of your Council in the matter.

A suggested Form of Consent is enclosed.

I am,

Sir,

Your obedient Servant,

T. P. GILL,

Secretary.

The Secretary  
of each County Council.

WEEDS AND AGRICULTURAL SEEDS (IRELAND) ACT, 1909.

SCHEDULE of Counties in which Noxious Weeds Orders have been made under the Act, and of the plants which have been specified as noxious weeds in each case.

Counties.	Noxious Weeds Specified.
Antrim, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Armagh, .. .. .	Ragwort, thistle, dock.
Down, .. .. .	Charlock, coltsfoot, thistle, dock.
Dublin, .. .. .	Ragwort, coltsfoot, thistle, dock.
Fermanagh, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Kerry, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Kildare, .. .. .	Ragwort, coltsfoot, thistle, dock.
Kilkenny, .. .. .	Thistle.
King's, .. .. .	Thistle, dock.
Limerick, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Londonderry, .. .. .	Thistle, dock.
Louth, .. .. .	Ragwort, coltsfoot, thistle, dock.
Meath, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Monaghan, .. .. .	Ditto.
Queen's, .. .. .	Ragwort, coltsfoot, thistle, dock.
Roscommon, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Tipperary (N.R.) .. .. .	Ragwort, charlock, thistle.
" (S.R.) .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Westmeath, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
County Borough.	
Dublin, .. .. .	Ragwort, charlock, coltsfoot, thistle, dock.
Belfast, .. .. .	Ditto.

## TECHNICAL INSTRUCTION.

### PROGRAMME OF EXPERIMENTAL SCIENCE, DRAWING, MANUAL INSTRUCTION, AND DOMESTIC ECONOMY FOR DAY SECONDARY SCHOOLS.

#### I.

#### EXPLANATORY CIRCULAR TO MANAGERS AND PRINCIPALS OF DAY SECONDARY SCHOOLS.

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN,  
*July, 1911.*

SIR OR MADAM,

The Regulations for the teaching of Experimental Science, Drawing, Manual Instruction and Domestic Economy in Day Secondary Schools have been re-cast for the Session 1911-12. The more important alterations which have been introduced are :—

- (1.) A Course in Physical and Commercial Geography has been substituted for that in Geology in the Special Courses.
- (2.) Students who have worked satisfactorily through the Third Year Syllabus of Physics will be permitted to proceed to the Fourth Year Syllabus of Mechanics, without having previously worked through the Third Year Syllabus of the latter subject.
- (3.) Students who are over eighteen years of age on the 1st day of June in the calendar year in which the Course is entered upon will be ineligible for grants.
- (4.) Grants will be payable, under certain conditions, upon the attendance of students at instruction in a Fourth Year Syllabus during a second year.

The Syllabuses of the courses of instruction, as well as the Prefatory Note to the Syllabuses in Experimental Science, may be obtained separately for distribution among teachers.

The Department have observed that it has been a practice in some schools to allow students under twelve years of age to attend instruction in the First Year Syllabuses of the Preliminary Course. Such students have then, in the following Session, been permitted to enter the classes following the Second Year Syllabuses, and grants have been claimed upon the instruction afforded at the rates appropriate to the School year. The Department are of opinion that, as a rule, students under twelve years of age are not capable of taking full advantage of instruction in the First Year Syllabuses, and they will, therefore, require that students attending classes in the First Year Syllabuses, before completing their twelfth year, shall repeat those Syllabuses before proceeding to the Course for the Second Year.

In regard to the case of pupils who may, under Regulation III., 16, be working a second time through any Syllabus of the Programme, attention is directed to the fact that pupils who are capable of profiting by promotion to a higher course should not be permitted to repeat the previous year's course. The Department will withhold grants in respect of instruction given to pupils who may repeat the course of any year

if, in the opinion of the Inspector, those pupils had made such progress as would enable them to take, with advantage, the work prescribed for the subsequent year, and in no case will pupils who were presented to the Department's Inspectors for the practical test for Honours Candidates, in connection with the examinations of the Intermediate Education Board for Ireland, be accepted for grants on account of a repetition of the same course.

The Department will require that Form S. 121, containing a list of all students following their Programme who are registered as in attendance at instruction on the 1st November, shall be submitted by the 5th November. This form will be dealt with by the Department and returned to the Managers in order that they may furnish thereon the further information required by the Department in respect of students presenting themselves for Experimental Science at the examination of the Intermediate Education Board.

The efficiency of instruction will, as hitherto, be tested by inspection, as a rule, without notice. It is, however, proposed that Special Inspections of a more thorough character shall be held, of which due notice will be given to the School Managers. It is intended that such inspections shall not, as a rule, be held more frequently than once in three years for any one school. During the latter part of the school session notice will be given of a visit mainly for the purpose of holding the qualifying practical tests for candidates for Honours in the subjects of the Programme at the Intermediate Examinations. This visit may, however, be dispensed with where there are no Honours Candidates to be presented. At any visit it will be within the discretion of the Inspector to test any or all of the classes by practical exercises in the laboratory, or by *visu et cetera* examination of classes or of individuals, or by written examinations, or by a combination of these methods.

It should be observed that the rates of payment may be increased by one-tenth or reduced by one or more tenths, as the Department, on consideration of the Inspector's report, may determine. Reduction by more tenths than one will be exceptional. In cases in which such exceptional treatment is necessary, the Department will consider the desirability of removing the School from the list of those aided by their grants.

The qualifications required of teachers other than those of Physical and Commercial Geography are set out in Circulars 16, 23, 24, and 25. The Department will this year recognise, as qualified to give instruction in Physical and Commercial Geography (Third Year Syllabus), those teachers who have successfully attended the Summer Course of Instruction now being held in the subject.

The Department reserve the right to withdraw recognition of a teacher's qualifications should circumstances occur to render such a course desirable.

Summer Courses of Instruction for Teachers will be continued as heretofore, but it is hoped that they will shortly have satisfied the need of qualifying teachers, and will develop into "Post Graduate" Courses on special subjects for those already qualified.

The details of the arrangements by which schools and pupils may obtain recognition under the regulations of the Intermediate Education Board for proficiency in Experimental Science, Drawing, and Domestic Economy, as well as the conditions required for a pass in these subjects, are published in the Rules of that Board.

I am,

Sir or Madam,

Your obedient Servant,

T. P. GILL,

Secretary.

## II.

## REGULATIONS FOR THE ADMINISTRATION AND DISTRIBUTION OF GRANTS FOR EXPERIMENTAL SCIENCE, DRAWING, MANUAL INSTRUCTION, AND DOMESTIC ECONOMY IN DAY SECONDARY SCHOOLS IN IRELAND.

## I. SUBJECTS.

1. EXPERIMENTAL SCIENCE shall mean such a system of instruction in Physical and Natural Science as will involve the greater part of the work being done by the pupils themselves in an approved laboratory.
2. DRAWING shall mean a system of instruction in Free and Mechanical Drawing, Design and Modelling.
3. MANUAL INSTRUCTION shall include instruction in the use of tools employed in Wood or Metal-working, and drawing in connection therewith.
4. DOMESTIC ECONOMY shall include instruction in Cookery and Home-sewing, and may include Laundry-work or any other form of practical instruction in household management of which the Department may approve.

## II. COURSES OF INSTRUCTION.

5. The Courses of Instruction include :—

- (a) A PRELIMINARY (TWO YEAR) COURSE, which is obligatory on all pupils and on all schools claiming grants under these regulations.
- (b) SPECIAL COURSES, and
- (c) AUXILIARY COURSES.

6. THE PRELIMINARY (TWO YEAR) COURSE may vary according to the character of the school ; but it shall include Experimental Science and Drawing. Not less than three hours per week shall be devoted to Experimental Science, and not less than one hour per week to Drawing.

In schools claiming grants for more than six hours' instruction in the Preliminary Course in any week, Manual Instruction or Domestic Economy must form part of the Preliminary Course ; and, in such cases, at least one hour and a half per week must be devoted to instruction in one of these subjects.\*

In Schools also which do not provide instruction in one of the Special Courses, or whose Special Course has not been recognised by the Department for attendance grants, Manual Instruction or Domestic Economy, with Experimental Science and Drawing, shall constitute the Preliminary Course ; and in order that the Preliminary Course in such schools may be recognised, the time-table must show that at least six hours' instruction per week is devoted to instruction in those three subjects.

7. The following are the SPECIAL COURSES. Grants shall not be payable on any one pupil in respect of more than three of these Courses :—

- (1) Physics : Third Year—General Physics, Heat and (optional) Electricity and Magnetism ; fourth year—(a) Wave Motion, Sound, and Light and Radiant Heat, or (b) Electricity and Magnetism. (Either or both fourth year syllabuses may be taken. In the latter case grants would be payable on any one pupil in respect of only one other course.)
- (2) Chemistry : Third year—Inorganic Chemistry ; fourth year—Inorganic Chemistry, with some Elementary Organic Chemistry.
- (3) Mechanics : Third year syllabus ; fourth year syllabus.
- (4) Botany : Third year syllabus ; fourth year syllabus.
- (5) Physiology and Hygiene : Third year syllabus ; fourth year syllabus.
- (6) *Physical and Commercial Geography* : Third year syllabus ; fourth year syllabus.

\* Attendance at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table.

(7.) Domestic Economy (Special Course): Third year syllabus; fourth year syllabus.

(8.) Drawing: Third year syllabus; fourth year syllabus.

Managers desiring to have the Special Courses of their schools recognized will be required to show that a fair proportion of the pupils who have worked through the Preliminary Course are in attendance at the Special Courses; that not less than three hours per week are devoted to instruction in each Special Course; and that at least one-third of the time is assigned to theoretical instruction.

Not more than six hours per week may be considered when computing the total number of hours of attendance at any one Special Course.\*

8. THE AUXILIARY COURSES, include Manual Instruction and Domestic Economy, which may be taken in any year, and may be taken in addition to the three Special Courses permitted under the foregoing paragraph. *Domestic Economy may not be taken as a Special Course and also as an Auxiliary Course by the same pupil in the same year.*

9. The subjects of the Preliminary, Special and Auxiliary Courses shall be followed in the order prescribed in the Department's published Syllabuses, and pupils may not be admitted to any course, who have not worked satisfactorily through the preceding, or equivalent courses. *The third year Syllabus of Physics is, however, accepted as the equivalent of the third year Syllabus of Mechanics, and a student who has worked through a satisfactory course in the former syllabus may take the fourth year Syllabus of Mechanics, although he may not have previously worked through the third year syllabus of that subject.*

### III. GRANTS.

10. Grants in respect of courses of instruction in Experimental Science, Drawing, Manual Instruction, and Domestic Economy, may be made, in accordance with the following regulations, to Day Secondary Schools in which the Department are satisfied that sufficient provision is made for the instruction of the pupils in the other main branches of a general education:—

11. Grants shall be payable in respect of attendances made by those students only who are over twelve and under eighteen years of age on the 1st day of June in the calendar year in which the course is entered upon, and who have completed an education which would entitle them to be placed in the Sixth Class of a school under the Board of National Education in Ireland.

12. Grants shall be payable in respect of attendances made by the pupils of those schools only which have been approved by the Department.

13. Grants on the attendance of duly qualified pupils will be made for each hour of instruction per week throughout the school year, according to the following scale:—

EXPERIMENTAL SCIENCE.—10s. for the first year of the course; 12s. 6d. for the second year of the course; 15s. for the third year of the course; and 20s. for the fourth year of the course.

DOMESTIC ECONOMY (as a Special Course).—8s. for the third or fourth year of the course.

DRAWING.—6s. for the first year of the course; 6s. for the second year of the course; 7s. for the third or fourth year of the course.

MANUAL INSTRUCTION AND DOMESTIC ECONOMY (Auxiliary Courses).—6s. for the first year of the course; 7s. for the second year of the course; 8s. for the third or fourth year of the course.

14. The numbers on which grants for each subject are to be calculated, at the foregoing rates, shall be determined by adding together the total number of hours of attendance made by all the pupils in that subject (at the approved time-table hours), and dividing by forty, the normal school year being regarded as of forty weeks.

\* Attendances at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table.

15. The syllabuses of instruction, "first year," "second year," etc., correspond with the "first year," "second year," etc., rates of payment.

16. *Grants may be paid in respect of the attendances of any one pupil for not more than two years in any Syllabus.* Payments will not be made in respect of any one pupil for more than five years in all. It is not obligatory that the claims should be made in consecutive academic years.

17. The grant to be made in respect of any subject of any year in accordance with the foregoing regulations, may, in exceptional cases, be increased by one-tenth when the Inspector of the Department is of opinion that the work is of conspicuous merit. It may also be reduced by one or more tenths for defects of equipment, or of organisation, or of instruction, or for any other cause which may tend to lessen the efficiency of the work done.

#### IV. CONDITIONS OF GRANTS.

18. The courses of instruction should begin in August or September of any year and must be *continuous* throughout the school year. The hours per week devoted to the course must be fairly distributed throughout the week; in exceptional circumstances, where *previous* application has been made, the Department may sanction another arrangement. Deviations from the approved time-table, unless *previously* sanctioned, will be regarded as a serious irregularity.

19. Claims for attendance grants may be preferred on behalf of those students only who have punctually and regularly attended instruction in all the obligatory subjects of the Preliminary, or of a Special, course. Grants shall only be payable in respect of the attendance of students at Auxiliary Courses when such attendance has been regular and punctual.

20. Claims for attendance grants may be preferred on behalf of those students only who have been registered as in attendance at instruction in *each* of the subjects of the course on or before the *1st day of November* in any academic year.

21. Grants shall not be payable in respect of the attendances of pupils of any school which, after working for one academic year in accordance with the Department's regulations, has not the two years' Preliminary Course in operation.

22. Grants shall not be payable in respect of attendances at Manual Instruction or Domestic Economy (Auxiliary Courses) in any year, except in the case of pupils who have attended instruction in the Preliminary Course of Experimental Science and Drawing or in one of the subjects of a Special Course, in that year, in accordance with the Regulations.

23. A student who has been paid upon in respect of the third year Syllabus of any Special Course will be ineligible for grants in a succeeding year unless he either repeats that third year Syllabus under approved conditions or proceeds to the fourth year Syllabus of the same Special Course.

24. Grants will be made only upon a satisfactory report by an Inspector of the Department. The Inspector will satisfy himself not only that the attendances on which the claim is based have actually been made, but also that the instruction is of a class superior to that given in Elementary Schools.

25. Grants shall not be payable in respect of pupils who are reported by the Department's Inspectors as unfit to attend the Courses in which they have been receiving instruction.

26. Pupils on the roll of a National School are not eligible for attendance grants.

#### V. REGISTRATION.

27. Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes (Form 44 S.); attendances not registered in the manner indicated on the official



registers, or registered before the receipt of Form S. 44, will be disregarded. A class may not be said to have begun until attendances are so registered.

#### VI. LABORATORIES.

28. Grants will not be made for instruction unless due provision is made for experimental work in Science, on the part of the pupils, in properly equipped and approved laboratories.

#### VII. DURATION OF LESSONS.

29. Practical instruction in Science, Manual Instruction and Domestic Economy, must be given in lessons of at least eighty minutes' duration.

30. Lessons of less than forty minutes' duration will not be considered in computing the "total number of hours of attendance."

31. The minimum time per week recognised for grants on behalf of attendance at Manual Instruction or Domestic Economy is one and a-half hour.

32. The time-table of the school must be arranged so as to leave sufficient time to the teacher for preparation of laboratory work.

#### VIII. SIZE OF CLASSES.

33. Not more than forty pupils shall be taken at a time by one teacher for Theoretical Instruction, nor more than twenty for Practical Instruction in any subject, unless an assistant recognised by the Department, is provided. In that case the number for Practical Instruction may be increased to thirty. Instruction in Drawing may, for this purpose, be regarded as theoretical instruction.

34. Where classes for practical instruction are small, concurrent instruction in two Syllabuses may be exceptionally allowed, but the approval of the Department must be obtained in each case.

35. Concurrent instruction in the first and second year syllabuses of the Preliminary Course in Drawing will be allowed under one teacher where the number of pupils under instruction does not exceed thirty.

#### IX. GENERAL CONDITIONS.

36. The qualifications of the teachers and assistant teachers, and the time-table of the school must be approved by the Department.

37. It shall be a condition of grants being made, that, except in the case of teachers who give their services gratuitously, a fixed salary shall be paid to the teachers of the classes, either in respect of these classes or of their work in the school as a whole; that a reasonable sum of money shall be provided for the upkeep of the premises; and that the grants obtained shall be paid into the school account and be used for improving the efficiency of the school.

38. That portion of the income of a school which is derived from grants in accordance with these regulations must be applied to such purposes as shall be approved by the Department. If at any time it appears that the application of the income is unsatisfactory, the assistance of the Department may be withdrawn. An account of the receipts and expenditure of each school in respect of these grants must be furnished if required by the Department.

39. The Department reserve, under these regulations, the right to withhold grants from any school conducted for private profit in which the fees are, in the Department's opinion, excessive, or which is situated in a locality already sufficiently supplied with public institutions.

40. The decision of the Department in regard to all questions arising in connection with the payments of grants under this programme must be regarded as final.

# PROGRAMME FOR TECHNICAL SCHOOLS AND SCIENCE AND ART SCHOOLS AND CLASSES.

## REGULATIONS FOR GRANTS.

### I.—*Conditions under which School and Classes may be recognised for Grants.*

1. The school or class must be under the superintendence of a Committee appointed under Section 14 of the Agriculture and Technical Instruction (Ireland) Act, 1899, or other responsible body of managers, recognised by the Department, to whom grants will be paid.

2. Grants under these regulations will only be made in respect of schools or classes in Counties, County Boroughs or Urban Districts in which a rate for technical instruction is raised.

3. The premises in which classes are conducted, the accommodation and equipment, and the programme of instruction, must be approved by the Department.

4. The qualifications of teachers and assistant teachers and the timetable must be approved by the Department.

5. The managers of a school or class must make accurate returns of such particulars as are required by the Department and within the specified times.

6. The Department may from time to time require from the local Committees a report as to the provision made within their district, either by themselves or other managers, for instruction in the subjects of this programme, regard being had to the industries of the district, and the occupation of the inhabitants, and may, upon consideration of this report, recognise or refuse to recognise any further classes which may be proposed.

7. The schools and classes shall be at all times open to the Department's Inspectors, who will, from time to time, visit with or without notice, and report on the condition and suitability of the school buildings or class-rooms; the character and quality of the instruction, and its suitability to the needs of the locality; the adequacy of the teaching staff for the number of students under instruction, the progress of the students, which they may ascertain in such a manner as they may consider necessary; the method of registration; and generally as to the organisation of the school work, and the carrying out of the scheme of instruction in accordance with the Department's Regulations.

### II. (a)—*Technical Schools.*

8. The authorities of each school working under this section must provide a series of suggested courses of instruction, which have grown out of a study of local industrial conditions. These courses of instruction should be made up of allied subjects, should be designed to extend over three or four years, and should be progressive in character. In the case of small schools, however, two year courses may be accepted. In addition to these in schools admitting students who possess only the minimum requirements for admission to a Technical School, an Introductory Course should be provided.

9. The courses proposed by the authorities of each school must be submitted to the Department by the 1st August, and must be accompanied by *Syllabuses (in duplicate) in cases where these have not already been approved*. These proposals will require the written approval of the Department. A draft of a convenient form in which to draw up the courses is set out in Appendix E.

10. The instruction should be given in evening classes, but where the Department consider that local circumstances justify the establishment of day classes, such classes may be formed.

11. An evening class is one in which instruction begins at or after 4 p.m. throughout the week, or at or after 1 p.m. on Saturdays.

12. A day class is one in which instruction begins before 4 p.m. throughout the week, or before 1 p.m. on Saturdays.

## (i.)—INTRODUCTORY COURSE.

13. Introductory course classes should be of such a nature as will fit students to take up a specialised course of technical instruction.

14. The subjects of instruction in respect of which payments are made under this division are :—

(a) English.

(b) Mathematics.

(c) One or more of the following :—

Experimental Science, Drawing, Manual Work in Wood or Metal, *Domestic Economy*.

15. Students on whom grants are claimed must have received such an education as would entitle them to be placed in the sixth class of a school under the National Board.

16. All students under instruction in the Introductory Course must attend instruction in each of the sections (a), (b) and (c) of paragraph 14 above.

17. Students registered in the Introductory Course will not be eligible for payments in a Specialised Course in the same session.

## (ii.)—SPECIALISED COURSE.

18. A specialised course of instruction for any student on whom payment may be claimed shall consist of a scheme of study in two or more subjects of a course approved by the Department, and extending over three or more years.

In the first year of specialisation students must take up at least two and not more than three subjects, and in subsequent years not more than three subjects.

The Department will require, as a rule, that one main subject will be continued throughout each student's course of study. The instruction received in this main subject, as well as in other subjects approved as part of the course, will be eligible for grants at the rates appropriate to the year of specialisation of the student.

In courses for women, where a student adopts a course of study in which the main subject is a subject other than in Domestic Science, and which complies with the minimum requirements as to the number of subjects to be taken, the Department will allow grants in respect of instruction in Domestic Science, provided that not more than three subjects in all are taken in any year.

19. For the purposes of grants the subjects which may be included in specialised courses of study, and on which payment may be made, are grouped as follows, but courses of study may be made up of subjects taken from different groups.

Group A.—Commercial Subjects (Section A.)

Group B.—(1) Commercial Subjects (Section B.)

(2) Languages.

(3) Mathematics.

Group C.—Science (Pure and Applied.)

Group D.—(1) Handicraft.

(2) Domestic Science.

Group E.—Art Subjects.

Group A.—*Commercial Subjects (Section A.)*

Commercial subjects which involve mostly mechanical operations, such as shorthand, book-keeping, copying, indexing, filing, correspondence, typewriting, and the mechanical operations concerned with postage, telegraph and banking.

Group B.—(1) *Commercial Subjects (Section B.)*

This group includes the study of subjects which require wider general knowledge and more intensive study than those in Group A., such as

economics of industry and commerce, commercial law, accountancy, banking and currency, insurance, statistics, railway administration, and economic and commercial history and geography.

(2) *Languages.*

The teaching of languages in the evening is partly a subject of general culture; is required partly for commercial correspondence, and partly for those who have to deal with the mechanical operations of seeing books and other literature through the press. The group may include Irish, French, German, Spanish, Italian, or any other language (including history and literature) which a committee can show to be required by the circumstances of a locality.

(3) *Mathematics.*

Mathematical subjects, including the treatment of the subject in a practical way; such treatment, for example, as is usually given under the subject of mensuration or of practical plane and solid geometry.

Group C.—*Science (Pure and Applied).*

Under pure science will be included such subjects as mechanics, physics, chemistry, biology, botany, zoology, physiology. Under applied science would be included naval architecture, navigation, nautical astronomy, building construction, machine construction, and other subjects involving systematic instruction in the underlying scientific principles, and which would be classified under such headings as:—

- (1) Building industries.
- (2) Metal industries.
- (3) Textile industries.
- (4) Printing and process industries.
- (5) Furniture industries.
- (6) Leather industries.
- (7) Woodworking industries.
- (8) Carriage Building industries.
- (9) Electrical industries.
- (10) Chemical industries.
- (11) Agricultural industries.

At least half the instruction in subjects included in this group should be practical, and must be given under approved conditions of accommodation and equipment.

The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

Group D.—*Handicraft and Domestic Science.*

- (1) Handicraft—manual instruction in wood and metal, woodcarving.
- (2) Household subjects, including cookery and hygiene, housewifery, laundry-work, dressmaking, millinery, needlework.

Group E.—*Art Subjects.*

Drawing (free and mechanical), design, painting, architecture, modelling and applied art such as black and white illustration, goldsmiths', silversmiths', and jewellers' work, stained glass work, mosaic, enamelling, and any other subject of applied art which a committee can show to be required by the circumstances of their locality.

The first year of a student's course in Art must include instruction in the two subjects—free and mechanical drawing.

20. The total attendances of any student at any approved course of study must be fairly distributed over the subjects of the course.

21. Students registered in this section must :—

- (a) have satisfactorily followed the Introductory Course, or
- (b) have passed in the Junior Grade Examination of the Intermediate Education Board, or
- (c) be certified by the Principal or responsible teacher to have reached an equivalent satisfactory standard of education.

22. In the case of students registered under 21 (c) the following particulars must be submitted in writing to the Department's Inspector for his approval :—

- (i.) any examinations passed which are regarded as equivalent to (b), or
- (ii.) the marks obtained at entrance examinations held in the Technical School. (The worked papers should be retained on the school premises); or,
- (iii.) any special reasons for admitting students to specialised courses.

(iii.)—GRANTS.

(a) EVENING CLASSES.

23. Grants will be made upon the total number of hours of attendance of fully qualified pupils, at the following rates per attendance-hour :—  
Introductory Course, 2d.  
Specialised Courses :—

Year of Course.	Group A. Commercial Subjects. (Section A.)	Group B. (1) Commercial Subjects (Section B.), (2) Languages, (3) Mathematics.	Group D. Handicraft and Domestic Sciences.	Group C. Science (Pure and Applied).	Group E. Art Subjects.
First Year	d. 2	d. 4	d. 4	d. 6	d. 4
Second Year	3	6	5	9	6
Third Year	4	9	6	12	9
Fourth and subsequent years	5	15	6	21	12

24. The rates of grants payable in respect of each group may, in any school, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

25. An increment for continued attendance at instruction in the case of individual students will be paid on the total attendance-hours at all subjects of an approved course, in the introductory or in the specialised courses.

*Rate of Increment for Continued Attendance.*

For each hour from 21 to 40 hours, 1d. per hour

"	"	41 to 60	"	2d.	"
"	"	61 to 80	"	3d.	"
"	"	81 to 100	"	4d.	"
"	"	101 to 120	"	5d.	"

No increment will be paid on attendance-hours exceeding 120.

## (b) DAY CLASSES.

26. Grants to Day Classes will be made at half the above rates, and no increment on account of instruction given in these classes will be payable. Not more than 400 hours' attendance in all in any one session may be claimed upon in respect of any student attending a day class.

## (iv.)—REGULATIONS FOR PAYMENT OF GRANTS.

(See also General Regulations.)

27. Each student must be registered as in attendance at instruction in his course on or before the 1st December in any session.

28. A year's work will involve at least forty hours' instruction in the subject matter of any course of study, and students who have not satisfied this requirement may not be registered for attendance grants in a higher course.

29. Students will be eligible for grants in the same Syllabus in a subject for not more than two School Sessions. Grants will not, however, be paid in respect of a second year's attendance in the same Syllabus should the student's attendance be claimed on generally at the rates appropriate to a higher year of specialisation.

30. Students will be eligible for grants for not more than two School Sessions at the rates for the introductory course, or for any one year of specialisation.

31. *Students will, unless in exceptional circumstances, be required to pursue the course of study which they may adopt upon entering the school. In the case of students who may, with the approval of the Department, change their course payments will be made at first year rates only in respect of the first year of specialisation in the new course, and a further change will not be approved until they have completed a satisfactory amount of instruction in that course.*

32. The attendance of teachers at day classes may be paid upon at evening rates.

## II. (b).—Technical Classes.

33. Grants at a lower rate than those set out in Section II. (A.) will be paid upon the attendance of pupils in any approved subject of instruction under the following conditions :—

34. The rates of payment will be :—

- |  |               |
|--|---------------|
| (1) For Literary or Commercial Subjects . . . . .                  | 2d. per hour. |
| (2) For Art, Handicraft and Domestic Science<br>Subjects . . . . . | 3d. per hour. |
| (3) For Science (Pure and Applied) Subjects . . . . .              | 4d. per hour. |

35. Grants under this section will not be paid in respect of more than one subject for each student.

36. Domestic Science and Agricultural Science for the purpose of this regulation, will each be regarded as one subject.

37. Grants will not be paid under this Section on account of students registered under Section II. (A.).

38. The grant on account of any Class under this Section will, as a rule, be the normal grant calculated upon the basis set out above, but the grant for any subject may, on account of conspicuous merit, be increased by one-tenth, or upon grounds of inefficiency, be decreased by one or more tenths, as the Department may decide.

39. The arrangements regulating the admission of students must be such as to exclude from a class any student, who from want of sufficient preliminary training, or other cause, is not qualified to take advantage of the instruction given in it. The grant may be withheld on account of any students whom the Inspector reports to be thus unqualified.

40. The practical work of the students must not include a continued repetition of manipulative processes of which they have acquired a knowledge.

### III.—*Teachers' Classes.*

41. Where special classes or courses are established at a Technical School or Central Institution (other than a Training College) for the instruction of teachers of Primary or Secondary Schools in the subjects of this programme, in accordance with a scheme approved by the Department, grants may be paid at the rate prescribed for the third year of specialisation under Section II., 23, of this programme.

42. Payments may be made in respect of any teacher for any subject for not more than three years, and will be at the same rate for each year.

43. The amount of grant payable under these rates may in any school, upon grounds of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

44. No increment grants will be payable under this Section.

45. The Instructors must be recognised by the Department as qualified for this special work.

46. Proposal for the conduct of classes under this Section must be specially submitted for approval, and should include particulars as to the number and status of the teachers for whom the class or course is organised, the proposed syllabus of instruction, and the special qualification of the teacher.

47. Classes working under this Section will be required to submit to such examination as the Department may decide.

48. Grants will not be paid in respect of the attendance at these classes of students other than teachers actually engaged in Primary and Secondary Schools. *Monitors, and Pupil Teachers in National Schools, are not regarded as "teachers" for this purpose.*

### IV.—*Day Schools for Apprentices and others Engaged in Business.*

49. Day technical or commercial schools or classes, which are conducted by properly constituted managers, either in conjunction with works, business houses, or technical schools, with a view to improving the conditions of local industries and commerce, and to the further training of sub-managers, foremen, tradesmen or apprentices, may be admitted for grants under this section.

50. Such schools or classes must be open on one or more days of the week, not later than six o'clock in the evening, or than 1 p.m. on Saturdays.

51. Grants not exceeding three-fourths of the certified annual expenditure for the conduct of such schools or classes may be made by the Department in respect of students for whom an employer's certificate can be produced, showing that the students have been engaged during the session in a business, trade, or industry, or that they are indentured or properly engaged as apprentices to a firm or to an individual.

52. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers.

53. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

54. The accommodation provided, the courses of instruction, the syllabuses of the subjects taught, the qualifications of the teachers, the time-table of instruction and the estimate of expenditure, must be approved by the Department.

55. The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

56. The amount of grants payable in respect of any school may, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

### V.—*Schools of Art.*

57. Schools of Art, which provide for students, the majority of whom

are industrial, courses extending continuously over two or three years, according to a scheme approved by the Department, may be paid grants not exceeding three-fourths of the actual annual expenditure incurred in the conduct of such courses.

58. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers. An estimate of the expenditure must be submitted for the approval of the Department before the commencement of the session.

59. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

60. No grants will be payable to Schools of Art adopting this section of the regulations, under the methods of payment set out in Sections II. and III.

61. Recognition may be withheld or withdrawn from any School of Art in which, in the opinion of the Department, the efficiency of the instruction and the number of students in attendance do not justify the expenditure involved.

62. For the purpose of this section a School of Art must satisfy the following conditions:—

- (a) The rooms and equipment must be approved by the Department, and must be wholly devoted to elementary and advanced instruction in art.
- (b) Provision must be made for drawing from life and modelling, and for instruction in ornamental and decorative art.
- (c) The Principal Teacher must hold an art master's certificate or an equivalent qualification.
- (d) Assistant teachers must possess qualifications recognised by the Department (*vide* Appendix A.).
- (e) Both day and night classes must be held. The night class must meet under the instruction of the Principal Teacher for two hours for at least three nights per week during forty weeks of the year, and the day class for the same period for at least three hours per day on two days of the week.

63. The amount of grants payable in respect of any school, may, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

#### VI.—*Training Colleges.*

64. Grants may be made for the instruction of students in training colleges in mathematics, experimental science, and drawing.

65. The rates per attendance-hour at which grants will be paid are as follows:—

	First Year.	Second Year.
Mathematics, . . .	d. 2	d. 3
Experimental Science .	3	4½
Drawing . . . . .	2	3

66. No increments will be payable on such attendances.

67. Not more than 400 hours in all, nor more than 200 in any one of these subjects, may be allowed for purposes of grants in the case of any one student.

68. Grants in respect of any student may be claimed once only in the first year course and once only in the second year course.



69. The rates per attendance-hour may, upon account of exceptional merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, on consideration of their Inspector's report, may determine.

70. Syllabuses of the courses of instruction must be submitted at the beginning of the session for the Department's approval.

#### VII.—*General Regulations.*

*(Applicable to all Schools and Classes conducted under this Programme).*

71. Each school or class working under these regulations will be required to keep an admission register which shall show for each student :—

- (1) full name and date of birth,
- (2) business, trade, or occupation,
- (3) school or college at which the student received his general education, and standard of education attained, with particulars of highest examinations passed.
- (4) qualifications to enter a technical school, or class,
- (5) classes attended each session in the school.

NOTE.—Suitably drafted admission forms may be made to fulfil the Department's requirements for an admission register. In larger schools it will be found more convenient to adopt the card-index system, the particulars required being transferred from the students' admission forms.

72. The registration of students must be conducted in accordance with the regulations set out on the official registers.

Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes; attendances not registered in the manner indicated on the official registers for the session will be disregarded. A class may not be said to have begun until attendances are so registered.

73. Lessons must be of one, one-and-a-half, two, two-and-a-half or three hours' duration. Laboratory or workshop practice must be given in lessons of not less than one-and-a-half hours' duration.

74. Not more than forty students may be taken at a time by one teacher for theoretical instruction, nor more than twenty for practical instruction in any subject, unless an assistant, recognised by the Department, is provided, in which case the number may be increased to thirty. The special circumstances of large institutions will be exceptionally considered by the Department on written application.

75. Each class in any subject must receive at least twenty hours' instruction in the session.

76. Grants will not be paid for less than twenty hours' attendance in respect of any one student. In cases in which it is permissible or necessary for a student to take more than one subject, grants will not be paid on account of any subject in which less than ten hours' attendance is made.

77. Grants will not be paid on account of any attendances lost, or on account of any period during which the school is closed for epidemic illness, but where the Department are satisfied that any failure to comply with these regulations has been due to epidemic illness or other unavoidable cause, they may relax the regulations as far as may be necessary to meet the case.

78. If any of the conditions on which the grant is awarded are not fulfilled, the Department may withhold the grant, or, if they think fit, may pay the grant with or without deductions, warning the managers that a grant will not again be paid under similar circumstances.

79. Students may not be registered for grants under these regulations who are under fourteen years of age, and no student can be registered for grants under these regulations in respect of whom any grant is paid by the Department under any other regulations.

80. Grants may not be claimed under these regulations on account of any scholar on the roll of a school (day or evening) under the Board of National Education.

#### VIII.—*Qualifications of Teachers.*

81. It is not proposed, in future, to demand the same high qualifications from teachers in small schools as from teachers in the larger technical institutes, especially in the county boroughs, nor to approve of the larger institutions employing teachers who might for economic or other reasons have to be accepted as teachers in small schools. Each application will be dealt with on its merits, bearing in mind the special circumstances of each district, and the finances of the school. Some of the certificates which will be accepted for provisional recognition by the Department are, however, set out in Appendix A.

82. The final appointment of a teacher should not be made until his qualifications have been approved in writing by the Department.

83. A register is kept by the Department containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject to the satisfaction of the Department for at least one session.

#### IX.—(a) *Local Science and Art Scholarships.*

84. Where County Committees of Technical Instruction have established a system of Scholarships for boys as part of the approved scheme of technical instruction for the county, the Department may make a grant in aid of the Scholarship fund not exceeding half the value of the Scholarships awarded. This grant will not in the case of any county exceed £50 in any one year.

#### (b) *Local Exhibitions.*

85. Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions, of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial or Art School, the Department may make a grant in aid of the Exhibitions awarded not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age; they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education.

86. In the case of exhibitioners whose admission to the Royal College of Science for Ireland, Dublin, or the Metropolitan School of Art, Dublin, has been sanctioned by the Department, the fees for tuition at these Institutions will be remitted. Where the Exhibition is held in a school, under the management of the Technical Instruction Committee by whom the Exhibition is established, the Department will require that the Committee shall remit the fees for tuition. In the case of all Exhibitions held at other approved Institutions, the Department will be prepared to pay half the fees for tuition in an approved Course, provided that the Technical Instruction Committee, by whom the Exhibition is established, provide the other half from their funds. The Department's grant in

such circumstances will not, however, exceed the sum of £10 in respect of any one exhibition.

87. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their studies. Committees proposing to establish Exhibitions must submit, for the Department's approval, a scheme for the award of Exhibitions.

88. The Department may refuse to aid any Exhibition if there is not a sufficient number of competitors, or if the selected candidate does not, in their opinion, show sufficient merit to justify the award of an Exhibition.

#### *X.—Certificate of Satisfactory Completion of Course.*

89. A certificate may be issued to any student who has followed in a Technical School a sufficiently satisfactory course, extending over at least two years of specialisation and an Honours certificate to any student who has followed an approved course extending over at least four years of specialisation. The certificate forms will be prepared and filled in locally, and signed by the Chairman of Committee and Principal of the school. The Department will afterwards stamp them to give them authoritative recognition. The names of the subjects of the course in each year; the number of hours' instruction, and the number of years' attendance should be inscribed on the back of the certificate.

90. The Department may, as necessity arises, modify or add to this Programme; but no important changes will be made without due notice.

91. The decision of the Department in all questions arising in connection with the payment of grants under this Programme must be regarded as final.

### APPENDIX A.

#### QUALIFICATIONS OF TEACHERS.

A register has been formed, containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject, to the satisfaction of the Department, for at least one session.

Provisional recognition will, as a rule, be accorded in respect of the following qualifications:—

1. The Degree of any University, or the Diploma of an approved Day Technical University College, in respect of subjects taken at the final examination for the Degree or Diploma.

2. Full Technological Certificates in the First Class of the Honours Grade of the City and Guilds of London Institute.

3. The Irish Secondary Teachers' Drawing Certificate in respect of elementary instruction in Art subjects, such, for example, as the teaching of Drawing to classes of the Introductory year.

4. The Irish Secondary Teachers' Honours' Drawing Certificate in respect of the subjects named on the certificate. In county boroughs, and in the larger technical schools where circumstances appear to demand it, higher qualifications will be looked for.

5. The Department's Diploma in respect of Domestic Economy subjects in the case of students trained at the Irish Training School of Domestic Economy.

6. Diplomas in respect of Domestic Economy subjects awarded by the Board of Education, by the National Union, or by the late Kildare Street School of Cookery, now the Irish Training School of Domestic Economy.

7. Certificates in respect of Manual Instruction issued by the Department at the close of courses of training of Manual Instructors conducted in Dublin.

8. The Teachers' Certificates in Manual Training (Woodwork and

Metalwork) of the City and Guilds of London Institute, and the Teachers' Higher Certificates (Woodwork and Metalwork) of the Board of Examinations for Educational Handwork.

9. Certificates of Class I., Stage III., of the Royal Society of Arts.

10. Teachers' Diplomas of the London Chamber of Commerce in respect of commercial subjects and languages named thereon.

11. Pitman's Full Teacher's Certificate for Shorthand.

12. The certificate of the National Board, in respect of English and Mathematics of the Introductory year.

First-class Certificates in Stage II. of Science subjects of the Board of Education will not alone be recognised as sufficient qualification to teach the subject named on the certificate.

For recognition as teacher of a modern language, high attainments, and some conversational ability, will be looked for.

Specially qualified persons will always be exceptionally recognised; but such recognition will be granted only when the applicant for recognition has satisfied the Department that he is specially qualified. Applications for special recognition should be accompanied by a complete detailed statement of the applicant's course of study and work; and should be supported, as far as possible, by certificates from professors or employers. In order to determine finally whether a teacher has sufficient technical knowledge of the subject which he seeks to teach, the Department may request him to undergo a special examination. Such special examination will, as a rule, be held in Dublin; and the applicant will have to bear his own travelling and personal expenses in connection therewith.

Registration of a teacher's qualification may be suspended (or further provisional recognition refused) upon evidence of insufficient knowledge of a subject for teaching purposes, or of inefficiency as a teacher from whatever cause arising.

## EXAMPLES OF SCHEMES OF TECHNICAL INSTRUCTION IN NON-AGRICULTURAL SUBJECTS.

### COUNTY CORK.

#### TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

The Scheme, subject to the provisions requiring local contributions from rates is applicable to all the Urban Districts (with the exception of Queenstown), and to all the Rural Districts within the administrative area of the County Council.

Population of the area administered under the Scheme:—Urban Districts, 32,994; Rural Districts, 287,586; total, 320,580.

Valuation of the County:—Urban Districts, £64,321; Rural Districts, £1,026,974; total, £1,091,295.

Value of 1d. rate:—Urban Districts, £262; Rural Districts, £4,279; total, £4,547. The local contribution from the rates will be paid over to the Committee (a) by the County Council in instalments in September, December, March and July; and (b) by the Urban District Councils at various dates before the end of the financial year.

#### *Technical Instruction Committee.*

The Committee is a Joint Committee of the Cork County Council and the Urban District Councils of Clonakilty, Fernoy, Kinsale, Macroom, Mallow, Middleton, Skibbereen and Youghal. It consists of twenty-eight members, of whom seven are Councillors, and twenty-one added members

*Chief Industries.*

The most important industries (excluding agriculture and allied industries) of the Urban and Rural Districts of the County are :—building trades, distilling, brewing, shipping, fishing, lace-making, brick-making, stained glass-making, flour manufacture, woollen manufacture, chemical works, mineral water works, condensed milk, ferrumite, tanning, paper manufacture.

*Objects of the Scheme.*

The objects of the Scheme are to provide, mainly by means of evening schools and itinerant classes, instruction in science, art, technological, commercial, and domestic economy subjects, chiefly for persons engaged in various industries during the day.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Evening Schools.
- III. Technical Classes for Girls.
- IV. Domestic Economy Day Classes.
- V. Instruction in Manual Work and Domestic Economy.
- VI. Preparatory Course of Instruction.
- VII. General Conditions.

## I. FINANCE.

*A. Estimated Income :*

(1) Contribution from the County Council (the produce of a rate of $\frac{1}{4}$ d. in the £ levied over the Rural Districts in the Financial Year ending 31st March, 1912)	£2,130
(2) Contributions from the Urban District Councils of Clonakilty, Fermoy, Kinsale, Macroom, Mallow, Middleton, Skibbereen and Youghal (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1912)	230
(3) Contributions from the Department :—	
(a) From Endowment	£2,125
(b) Grants for instruction in Science, Art, etc.	350
	<hr/> 2,475
(4) Students' Fees	350
(5) Sundry Receipts	50
	<hr/> 50
Total	<hr/> £5,235

*B. Estimated Expenditure :*

(1) Evening Schools, Domestic Economy Day Classes and Itinerant Classes (Rent of Rooms, Payment of Teachers other than those specified below, Heating, Lighting, Materials, Advertising, etc.)	£1,250
(2) Two County Art Teachers (Salaries and Expenses)	440
(3) One Chemistry Teacher (Salary and Expenses)	185
(4) Three Special Teachers of Commercial Subjects (Salaries and Expenses)	610
(5) Eight Itinerant Instructors in Woodwork (Salaries and Expenses)	1,500
(6) One County Teacher of Lace-making and Design (Salary and Expenses)	110
(7) Three County Instructresses in Domestic Economy (Salaries and Expenses)	420
(8) Technical Classes for Girls	65

(9) Residential School of Domestic Training, Dumanway :—			
(a) Salary of Certified Teacher of Domestic Economy .. .. .	£100		
(b) Salary of Assistant Teacher .. .. .	40		
			140
(10) Equipment (Metal Work) .. .. .			30
(11) Administrative and incidental Expenses, viz :—			
(a) Secretary's Salary .. .. .	£150		
(b) Assistant's Salary .. .. .	47		
(c) Office Expenses, including Printing, Stationery, Advertising, etc... .. .	210		
			407
Total .. .. .	£5,157		

### *G. Allocation of Accumulated Funds :*

The funds remaining unexpended from the working of the Scheme in previous years may be applied in establishing classes other than those already provided above, in providing additional equipment and apparatus, and for such other purposes as the Committee, with the approval of the Department, may, from time to time, determine.

## II. EVENING SCHOOLS.

The Committee will, subject to the written approval of the Department, establish, or aid in establishing, so far as the funds at their disposal permit, Evening Technical Schools or Classes, in places to be previously approved by the Committee and the Department :—

- (a) 1. By acquiring, or giving aid towards acquiring, accommodation for Technical Classes :—
  - (i.) At rent for short term ; or
  - (ii.) At rents for lease ; or
  - (iii.) By purchase.
2. By building, or giving aid for building, if necessary, Technical Schools.
- (b) By paying, or giving aid towards the payment of, a staff of permanent and temporary teachers. The temporary staff to be engaged by the hour, week, month, or session, as the case may be ; the permanent staff to be engaged as whole-time officers on annual salaries.
- (c) By providing, or giving aid towards providing, equipment.

### *Conditions under which Classes will be held.*

- (1) Classes must contain a fair proportion of industrial or commercial students eligible for recognition under the Department's Programme for Technical Schools and Science and Art Schools and Classes.
- (2) Classes must be conducted in accordance with the regulations of that Programme.
- (3) Classes must meet for not less than twenty hours' instruction in the Session.
- (4) Theoretical lessons must be of not less than one hour's duration, and practical lessons of not less than ninety minutes' duration.
- (5) Classes may not be conducted for grants under the Regulations for Elementary Evening Schools of the Commissioners of National Education.
- (6) The subjects of instruction must be suitable to the locality.

## III. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, capitation grants at the rate of £1 10s. per pupil for any number not exceeding ten, and at the

rate of 15s. per pupil for the remainder of the class, will be paid in respect of the attendance of girls at instruction in lace-making, crochet-making, needlework, sprigging, embroidery, drawn thread-work, shirt-making, or such other industrial or domestic subjects as may, from time to time, be approved by the Department.

*General Conditions for the Conduct of Classes and Payment of Grants.*

(1) The industry in which instruction is given shall be suited to the circumstances of the locality.

(2) The grants may be claimed on account of pupils who have received during the session not less than 240 hours' instruction as specified in Section 4 below.

(3) Grants may be paid in respect of a pupil's attendance at instruction in any one industrial subject for not more than two school sessions, but where circumstances have made it desirable to introduce a new industry, grants may be paid on account of a pupil for not more than three school sessions in all.

(4) The pupil, as part of the 240 hours' instruction, shall receive at least 40 hours' instruction in Domestic Economy subjects. (The 40 hours' instruction may be given in twenty lessons of two hours each, and must include practice. At least 30 hours must be devoted to Cookery; 10 hours may be given to Laundry Work. Not more than 60 hours' instruction in Cookery and Laundry Work may be reckoned in the total of 240 hours.)

(NOTE.—In order to assist managers of classes working under this section of the Scheme, to satisfy the conditions in regard to instruction in Domestic Economy, the Committee may, if they think it desirable, send a County Instructress to give the required course of instruction. It must be understood that where the services of the Committee's Domestic Economy Instructress are granted, the managers of the class are required to provide fire, light, and the necessary materials. The instruction given must be such as is applicable to the home life of those attending the course.)

(5) The equipment and instruction must be satisfactory. The Department's Inspectors will be specially directed to report how far the work is *instruction*, and how far the *practice* of an industry.

(6) The Sales and Wages Book and Attendance Registers must be satisfactorily kept.

(7) Grants will not be payable in respect of the attendance of pupils who are not over fourteen years of age at the time of admission to instruction, or who are on the Roll of a National School or of an Industrial School under the Irish Industrial Schools Act.

(8) Grants will not be payable under this section in respect of instruction in an industrial subject given by a teacher employed by the Committee.

(9) Managers intending to claim grants under this section must forward Form S.47 to the Offices of the Committee on or before the 1st October, 1910.

(10) Instruction must begin, under a recognised teacher, before the 1st December at the latest.

Should the sum (£65) allocated for the purpose of this section of the Scheme not enable the Committee to pay off the claims in full, at the rates mentioned above, the amount available will be divided in proportion to the claims admitted.

#### IV. DOMESTIC ECONOMY DAY CLASSES.

Grants for instruction given by Nuns who have been trained under the County Cork Scheme of Technical Instruction, and whose qualifica-

tions have been recognised by the Department, will be allowed by the Committee under the following conditions:—

**NOTE.**—Pupils attending Day Secondary Schools, National Schools, Industrial Schools (Government aided), or Technical Classes (Section III. of Scheme) may not be enrolled in these classes.

(1) The Committee will pay £7 10s. for each course of instruction. A course will consist of fifty lessons of two hours' duration each. Approval of the proposed time table must be obtained from the Department before a course is started.

(2) Not more than £40 will be paid by the Committee to any one teacher appointed under this Scheme in any academic year (1st August to 31st July). Two courses conducted concurrently will not be recognised unless one of the courses at least has a full complement of sixteen pupils.

(3) A pupil may not be registered for more than two courses, and may not be registered for two courses conducted concurrently.

(4) New pupils may not be admitted to any course after the sixth lesson of that course.

(5) No payment will be made for any course of instruction in which the average attendance for the whole course falls below six.

(6) Reasonable charges for materials, fire, and light, used for class teaching, and for necessary advertising will, on the production of satisfactory vouchers, be paid by the Committee.

(7) The fee to be paid by each pupil shall be 2s. for each course, and shall, together with any receipts from the sale of cooked dishes, be paid over to the Committee.

(8) A sum, not to exceed 2s. 6d. per week, may be allowed by the Committee towards the expenses of cleaning, lighting fires, etc., in connection with each course.

(9) The classes shall be open to females of all religious denominations.

(10) Notification of the formation of the classes must be submitted to the Committee on Form S.95.

## V. INSTRUCTION IN MANUAL WORK AND DOMESTIC ECONOMY.

The Committee, in order to meet the wants of remote Rural Districts, will appoint itinerant instructors in Manual Training (Woodwork) and in Domestic Economy. These teachers will give courses of instruction at centres (not already provided for by evening classes) to be approved by the Committee and the Department.

## VI. PREPARATORY COURSE OF INSTRUCTION.

A Preparatory Course, in connection with the Programme for Technical Schools and Science and Art Schools and Classes, will be opened at Clonsilla. This course will consist of instruction in English, Mathematics, and Drawing, and is intended for pupils who possess only the minimum requirements for admission to an Evening Technical School. The training afforded will be of such a nature as will fit them to take up a special course of technical instruction.

Applicants for admission to the course must have received such an education as would entitle them to be placed in the sixth class of a school under the National Board.

All students under instruction are required to attend instruction in each subject of the course.

## VII. GENERAL CONDITIONS.

(1) The Scheme is not intended to apply to children under fourteen years of age, but such children who have been placed in the sixth class of a National School, or who have received an equivalent education, may be admitted to classes provided that there is accommodation available. Under no circumstances may Scholars on the roll of a Primary



School attend classes under this Scheme which meet during Primary School hours.

(2) Schools or classes conducted or aided under the provisions of the Scheme shall be at all times open to the Department's Inspectors. (The Inspectors will, from time to time, report to the Department on the condition and suitability of the school buildings or class-rooms, the character of the instruction and its suitability to the needs of the locality, the sufficiency of the teaching staff for the number of students under instruction, the progress of the students—which they may ascertain in such a manner as may be necessary—the method of registration, and, generally, the observance of the provisions of the Scheme.)

(3) All classes eligible for grants under the conditions of the Programme for Technical Schools and Science and Art Schools and Classes shall be conducted in accordance with the Regulations of the Programme.

(4) Classes conducted or aided under the Scheme shall not be of such a size as to impair the efficiency of the instruction. (A practical class should consist of not more than twenty students under one teacher, and a theoretical or demonstration class of not more than forty students. Local Committees should assist teachers in keeping classes within these limits.)

(5) Control will be exercised over the admission to classes so that students may take only associated subjects, and admission to certain classes may be limited by entrance examinations in order that the classes may be of manageable size, and that students selected may be capable of taking full advantage of the instruction.

(6) Classes will, unless in exceptional circumstances, be closed should the average attendance for four successive lessons fall below six.

(7) Attendance Registers shall be carefully, regularly, and punctually marked.

(8) A Local Committee of Management shall be formed in each centre in the Rural Districts where classes are to be held. The Committee formed shall appoint an Honorary Secretary, and place itself in communication with the County Joint Committee. In an Urban District the classes shall be under the management of a Local Committee appointed for this purpose by the Urban District Council. Wherever the instruction of girls is involved a number of ladies should be included in the Local Committee.

The duties of a Local Committee are:—

(a) To arrange for suitable accommodation for the courses of instruction to be given; to awaken local interest, and to make due provision for the starting, or resumption, of the courses.

(b) To assist in securing regular and punctual attendance at the classes.

(c) To visit the classes from time to time, and to check and sign the registers; and

(d) To make recommendations to the County Committee as to local requirements in connection with the classes.

(9) Full particulars of the qualifications and experience of any teacher whom it is proposed to engage shall be submitted to the Department, and their approval of the appointment obtained, in writing, before the appointment is actually made.

(10) The previous written approval of the Department shall be obtained for any expenditure upon additional equipment, or for any purpose not covered by the proposals under the head of Finance. (Approval of such expenditure will not be given unless the proposals have been submitted for the Department's sanction *before any liability is incurred.*)

(11) Accurate returns of such particulars as are required by the Department shall be made at the specified times.

(12) Within seven days after any meeting of the Committee, a copy of the minutes of proceedings of that meeting, as entered in the minute book, shall be furnished to the Department.

(13) The accounts of the Committee shall be treated as part of the accounts of the Local Authorities, and will be audited as such by the Auditor of the Local Government Board.

(14) No money shall be spent under this Scheme in an Urban District, unless the Urban Districts contribute annually a rate of one penny in the £ or its equivalent.

The Scheme is subject to revision at the close of the academic year.

## COUNTY FERMANAGH.

### TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

The Scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban District of Enniskillen, and to the Rural Districts within the administrative area of the County Council.

Population of the County:—Urban District, 5,412; Rural Districts, 60,018; total, 65,430.

Valuation of the County:—Urban District, £14,300; Rural Districts, £228,129; total, £242,429.

Value of 1d. rate:—Urban District, £60; Rural Districts, £950; total, £1,010.

The local contribution from rates will be paid over to the Committee in two instalments, in April and October, 1911.

### *Chief Industries.*

The population is almost entirely devoted to agricultural pursuits.

### *Objects of the Scheme.*

The objects of the Scheme are to provide instruction in lace and crochet-work, needlework, manual training (woodwork), domestic economy, and hygiene.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Instruction in Industries.
- III. Instruction in Domestic Economy Subjects and Manual Training.
- IV. Training School for Lace Teachers.
- V. General Conditions.

## I. FINANCE.

### *A. Estimated Income:*

(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1912 .. ..	£350
(2) Contribution from the Urban District Council of Enniskillen (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1912) .. ..	59
(3) Contributions from Department:—	
(a) Annual contribution from Endowment .. ..	400
(b) Grants for Instruction in Science, Art, etc. .. ..	250
(c) Special grant in aid of the purchase of Equipment for the Technical School at Enniskillen .. ..	250
(4) From extern Day Secondary School for services of Teachers .. ..	50
Total .. ..	£1,259

*B. Estimated Expenditure :*

(1) Salaries and Expenses of Teachers of Industrial Subjects ..	£240
(2) Salary of Instructress of Domestic Economy .. ..	105
(3) Salary of Instructor in Manual Work .. ..	140
(4) Salary of Principal of Enniskillen Technical School ..	165
(5) Salaries of other Teachers at Enniskillen Technical School ..	110
(6) Travelling Expenses of Teachers referred to at (2) and (3) and Class Expenses .. ..	65
(7) Rent and Lighting of Technical School at Enniskillen ..	39
(8) Administration and Incidental Expenses:—	
(a) Secretary's Salary .. ..	60
(b) Office Expenses, Printing, Stationery, Advertising, etc. .. ..	60
(9) Equipment for Technical School at Enniskillen .. ..	250
Total .. ..	£1,234

## II. INSTRUCTION IN INDUSTRIES.

To improve the work in lace and crochet-making and in needlework carried on throughout the country, the Committee may appoint nine teachers. These teachers will give instruction at centres to be fixed by the Committee, with the approval of the Department, and each teacher will be required to give two lessons of three hours' duration each, on three days per week (or an equivalent amount of teaching), throughout the session. The two lessons per day may, or may not, be given in the same centre; but arrangements will be made whereby at least six hours' instruction per week shall be given at each centre.

A salary of £60 per annum may be allowed when the teacher is employed for thirty hours, or upwards, per week.

*Conditions under which the Classes will be held.*

(1) A Local Committee to be formed, who shall make known the objects of the instruction, obtain a suitable class-room, and be responsible for the proper cleaning and lighting of the room.

(2) All changes in the Time Table of the classes to be at once notified to the Committee.

(3) An accurate account of all receipts and expenditure to be kept for each class in the books provided for the purpose by the Department.

(4) A deduction of one penny per shilling to be made from the sale price of all articles. (The amounts so raised will be applied in meeting the cost of rent, fuel, postage, laundering, and incidental expenses, and in forming a fund to be used in paying ready cash for work done.)

(5) Laundering to be paid for at a rate not exceeding 5d. per pound's worth of work washed.

(6) Should the fund referred to at (4) above exceed, at the close of any academic year, one-tenth of that year's sales, a bonus may be granted out of the excess to each worker, at a rate of not more than 6d. per £ of the wages paid in the case of lace and crochet-workers, and 9d. per £ in the case of spriggers. (This bonus will only be paid after the accounts have been audited by the Secretary to the County Committee, and on his certificate that the position of the industry warrants such payment.)

(7) Any balance of the excess which may remain after providing for the above purposes to be returned to the County Committee.

III. INSTRUCTION IN DOMESTIC ECONOMY AND  
MANUAL TRAINING.

The Committee will appoint an instructress in Domestic Economy Subjects and Hygiene, and an instructor in Manual Training (Wood-work), who shall conduct courses of instruction in these subjects at centres and at times to be fixed by the Committee, with the approval of the Department.

These courses will consist of at least thirty lessons of two hours' duration each, and will extend over a period of about six weeks. A fee not exceeding 2s. 6d. will be charged for admission to each class.

#### IV. TRAINING SCHOOL FOR LACE TEACHERS.

A school for the training of skilled workers as teachers of lace and sprigging classes will be conducted in connection with the Technical School, Enniskillen. Instruction will be provided in lace-making, or sprigging, laundering, drawing and design, English, commercial arithmetic, business procedure, and hygiene.

Classes will be held daily under the supervision of a Principal holding special qualifications.

Students, while in attendance at the school must continue to practice their industry.

Candidates for entrance must pass an examination in English, arithmetic, drawing, and lace-making or sprigging.

Recognition of qualifications to give instruction in lace-making or sprigging will be accorded to those students only who attend satisfactorily during one complete session of twelve months, and who reach a satisfactory standard in an examination which will be held by the Department.

#### V. GENERAL CONDITIONS.

(See Section 7 Scheme for County Cork.)

### COUNTY LONDONDERRY.

#### TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

The Scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban District of Limavady, and to all the Rural Districts within the administrative area of the County Council.

Population of the area administered under the Scheme:—Urban District, 2,692; Rural Districts, 94,862; total, 97,554.

Valuation of the area administered under the Scheme:—Urban District, £6,474; Rural Districts, £295,163; total, £301,637.

Value of 1d. rate:—Urban District, £27; Rural Districts, £1,229; total, £1,256.

The local contributions from the rates will be paid over to the Committee as follows:—(a) by the County Council in instalments in August and November, 1911, and February and May, 1912; (b) by the Urban District Council in September, 1911.

#### *Technical Instruction Committee.*

The Committee is a Joint Committee of the County Council and the Urban District Council of Limavady. It consists of eighteen members, of whom fifteen are Councillors, and three added members.

#### *Chief Industries.*

Linen manufacture, shirt-making, flour milling, and agriculture.

#### *Objects of the Scheme.*

The objects of the Scheme are to provide, mainly by means of evening schools and itinerant classes, instruction in science, art, technological, commercial, industrial, and domestic economy subjects, chiefly for persons engaged in various industries during the day.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. Instruction in Permanent Centres.
- IV. Itinerant Instruction in Manual Instruction and Domestic Economy.
- V. Instruction in Industrial Subjects.
- VI. General Conditions.

## I. FINANCE.

### A. Estimated Income:

(1) Contribution from the County Council (the produce of a rate of ½d. in the £ levied over the Rural Districts in the financial year ending 31st March, 1912)	£306
(2) Contribution from the Urban District Council of Limavady (the produce of a rate of 1½d. in the £ levied in the financial year ending 31st March, 1912)	40
(3) Contributions from the Department:—	
(a) From Endowment	514
(b) Grant for instruction in Science, Art, etc.	300
(4) Students' Fees	70
(5) Sale of Books, Class Materials, etc.	30
(6) From extern School in respect of services of Art Teacher	21
Total	£1,281

### B. Estimated Expenditure:

(1) Salary of Principal	£200
(2) Salaries of two Instructresses in Domestic Economy	180
(3) Salary of Manual Instructor	125
(4) Salaries of other Teachers	305
(5) Wages of Caretakers	40
(6) Travelling Expenses and Maintenance Allowance of Teachers	110
(7) Maintenance Expenses of Schools	105
(8) Maintenance Expenses of Itinerant Classes	33
(9) Repairs to Premises	10
(10) Equipment	15
(11) Prizes	20
(12) Class Materials	50
(13) Administration (including Salary of Office Assistant, £28)	78
Total	£1,271

## II. SUBJECTS OF INSTRUCTION.

### Commercial Subjects

Shorthand and typewriting, book-keeping, business methods, commercial arithmetic, commercial English, commercial correspondence, commercial law.

### Language:

French.

### Mathematics:

Practical mathematics, practical plane and solid geometry.

### Science (Pure and Applied):

Carpentry and joinery, building construction and drawing.

*Handicraft :*

Manual instruction (woodwork and metalwork), woodcarving.

*Domestic Science :*

Cookery, laundry-work, dressmaking, needlework, sprigging, sick nursing.

*Art :*

Freehand, model and geometrical drawing, design, drawing in light and shade, painting.

The teaching of these subjects will be provided mainly by the following Instructors :—

(1) A Principal specially qualified to give instruction in technological and science subjects, whose duties shall be :—

- (a) To act as Secretary to the County Joint Technical Instruction Committee.
- (b) To organise Technical Schools in the Urban District of Llanvady and in the Rural District of Magherafelt, and to arrange for courses of instruction in such other centres as the Committee may, from time to time, decide upon, and generally to carry out the provisions of the Scheme in accordance with the instructions of the Committee, acting in conjunction with the Department of Agriculture and Technical Instruction.
- (c) To give instruction in each of the two Technical Schools and to supervise the work of the schools and classes.

(2) Two Instructresses in domestic economy subjects whose services shall be available in the Urban District of Llanvady, the Rural District of Magherafelt, and at such other centres as may, from time to time, be arranged.

(3) A Manual Instructor whose services shall be available in Llanvady and Magherafelt Technical Schools, and at such other centres as may, from time to time, be arranged.

(4) An Art Teacher whose services shall be available in the Llanvady and Magherafelt Technical Schools, and at such other centres as may, from time to time, be arranged.

(5) An Instructress in sprigging, whose services shall be available in two centres approved by the Department.

### III. INSTRUCTION IN PERMANENT CENTRES.

The administration of the Scheme in the Urban District of Llanvady and in the Rural District of Magherafelt will be in the hands of Local Committees appointed in accordance with the terms of Paragraph 8 of the General Conditions.

The teaching will, for the most part, be given by the Instructors referred to in Section II. Any subjects not provided for by these instructors may be taught by local qualified teachers.

### IV. ITINERANT INSTRUCTION IN MANUAL INSTRUCTION AND DOMESTIC ECONOMY.

The services of the instructors appointed under this Scheme will also be available, as far as may be possible, for other Rural centres in the County. The instruction most likely to be of value in such districts is, in general, that which will be imparted by the teacher of manual work and the teachers of domestic economy.

The courses of instruction in Rural districts will extend generally over six weeks, but where two centres can be worked concurrently the course may extend over three months. In either case it will be possible to secure at least thirty lessons in each course.

## V. INSTRUCTION IN INDUSTRIAL SUBJECTS.

With a view to improving the work in sprigging being carried on throughout the County, the Committee will appoint a teacher of this subject for which provision has been made in the foregoing Section. This teacher will give instruction at centres to be fixed by the Committee with the approval of the Department. The teacher will give two lessons of three hours' duration each per day. The two lessons per day may, or may not, be given in the same centre, but arrangements shall be made whereby at least twenty hours' instruction per week shall be given at both centres.

*Conditions under which the Classes will be held.*

*(See Section II. Scheme for Co. Fermanagh.)*

## VI. GENERAL CONDITIONS.

*(See Section VII. Scheme for Co. Cork.)*

### COUNTY MEATH.

#### TECHNICAL INSTRUCTION SCHEME.

*1st August, 1911, to 31st July, 1912.*

The Scheme, subject to the provisions requiring local contributions from the rates (see Finance), is applicable to the Urban Districts of Kells, Navan, and Trim, and to the Rural Districts within the administrative area of the County Council.

Population of the area administered under the Scheme:—Urban Districts, 7,780; Rural Districts, 59,717; total, 67,497.

Valuation of the area administered under the Scheme:—Urban Districts, £13,602; Rural Districts, £539,830; total, £553,432.

Value of 1d. rate:—Urban Districts, £57; Rural Districts, £2,249; total, £2,306.

The local contributions from the rates (Urban and County) will be paid over to the Committee before the close of the financial year ending 31st March, 1912.

#### *Technical Instruction Committee.*

The Committee is a Joint Committee of the Meath County Council and the Urban District Councils of Navan, Kells, and Trim. It consists of fifty-two members, of whom twenty-two are Councillors, and thirty added members.

#### *Objects of the Scheme.*

The objects of the Scheme are to provide, by means of itinerant instructors, technical classes for girls, and by maintaining a Technical School at Navan, instruction in technological, commercial, industrial and domestic economy subjects.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Itinerant Instruction.
- III. Technical School, Navan.
- IV. Technical Classes for Girls.
- V. General Conditions.

## I. FINANCE.

*A. Estimated Income :*

(1) Contribution from the County Council from rates levied over the Rural Districts in the financial year ending 31st March, 1912 .. .. .	£300
(2) Contributions from the Urban District Councils of Navan, Kells and Trim (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1912) ..	51
(3) Contributions from the Department :—	
(a) From Endowment .. .. .	£500
(b) Grants for Instruction in Science, Art, etc. .. .. .	50
	<hr/> 550
Total .. .. .	<hr/> £901

*B. Estimated Expenditure :*

(1) Salary of Instructor in Manual Work .. .. .	£140
(2) Salaries of two Instructresses in Domestic Economy .. .. .	180
(3) Travelling Expenses of Itinerant Teachers .. .. .	72
(4) Class Expenses, including Cost of Supplies, Rent of Rooms, Removal of Equipment, etc. .. .. .	110
(5) Maintenance of the Technical School, Navan .. .. .	70
(6) Interest on and Repayment of Loan for School Building .. .. .	40
(7) Contribution towards Salary of Commercial Teacher .. .. .	60
(8) Grants to Technical Classes for Girls .. .. .	75
(9) Administrative and Incidental Expenses :—	
(a) Secretary's Salary .. .. .	£62
(b) Office Expenses, Printing, Stationery, Advertising, etc. .. .. .	62
	<hr/> 124
Total .. .. .	<hr/> £871

*C. Allocation of Accumulated Funds :*

The funds remaining unexpended from the working of the Scheme in previous sessions, together with the balance of the funds for the present academic year, will be applied towards equipping the new Technical School, Navan.

## II. ITINERANT INSTRUCTION.

The Committee will employ one Itinerant Instructor in manual work, and two Itinerant Instructresses of domestic economy. Instruction will be given by these teachers in manual work, cookery, laundry-work, needle-work, and household management, in such centres within the County as may, from time to time, be determined by the Committee.

The courses of instruction will, as a rule, be of six weeks' duration, lessons being given each day, and will thus comprise at least thirty lessons; but where it can be conveniently arranged two courses may run concurrently. In this case the duration of the course will be three months, half the time in each week being devoted to one centre and half to the other.

The objects of the Scheme, so far as domestic economy is concerned, are set forth as follows :—

- (a) To provide, for the wives and daughters of farmers, labourers, and others, courses of instruction to enable them, with the ordinary means and appliances of their homes, and within easy reach of them, to manage their homes with method and economy, and make the most of available means. The courses



- will be directed to securing improvement in plain cookery, general cleanliness, and care of the young and sick.
- (b) The Secretary of the Committee shall give such assistance as may be necessary in the carrying out of the Scheme, and the expenses of locomotion, and any necessary printing and advertisements shall form part of the expense of the Scheme to be borne by the Committee, and to be expended in accordance with its requirements.
- (c) The Committee shall, with the approval of the Department, employ instructresses in domestic economy to give courses of instruction for the benefit of all classes, in particular for the wives and daughters of small farmers and labourers, who will be admitted to the courses on payment of a small fee, to be fixed by the Local Committee, subject to the approval of the County Joint Committee.
- (d) The course of instruction will include such subjects as :—
- (1) The daily routine of working people's homes.
  - (2) Plain cookery. (No article of diet to be used which is not in use or within easy reach of rural labourers and small farmers.)
  - (3) General method and cleanliness in work.
  - (4) Laundry-work and repairs to clothes.
  - (5) First lessons in the nursing of the sick in their homes.
  - (6) The poor man's budget. How to provide for the maintenance and comfort of a given number in a family on a given income.

The salaries and expenses of the teachers employed shall form a first charge on the funds of the Committee.

### III. TECHNICAL SCHOOL, NAVAN.

The Department will place at the disposal of the Committee the services of a teacher in commercial subjects, who will conduct such classes throughout the session as may be arranged to suit local requirements. The Committee will make a contribution of £60 to the Department towards his salary, and will also pay a proportion of his travelling expenses.

Courses will also be conducted in domestic economy and manual instruction under the teachers employed by the County Joint Committee.

A sum of £70 is allocated for rent and other expenses in connection with the classes.

### IV. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, capitation grants at the rate of £3 per pupil for any number not exceeding ten, and at the rate of £2 per pupil for the remainder of the class, will be paid in respect of the attendances of the girls at instruction in lace-making, crochet-work, dressmaking, needlework, sprigging, embroidery, drawn thread-work, shirtmaking, hosierymaking, or such other industrial or domestic subjects as may, from time to time, be approved by the Department.

In certain industrial subjects, such as lace-making, a knowledge of drawing is of great value to the worker. Where provision can be made for efficient instruction in drawing, a further grant of 10s. per pupil may be paid in respect of those girls who have qualified for the grant referred to in the foregoing paragraph, and have received not less than forty hours' instruction in drawing.

*General Conditions for the conduct of Classes and Payment of Grants.*

*(See Section III. Scheme for Co. Cork.)*

### V. GENERAL CONDITIONS.

*(See Section VII. Scheme for Co. Cork.)*

## COUNTY SLIGO.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

The Scheme, subject to the provisions requiring local contributions from the rates (see Finance), is applicable to all the Rural Districts within the administrative area of the County Council.

Population of the County, 73,213; valuation, £192,245; value of 1d. rate, £801.

The local contribution from the rates will be paid over to the Committee by the County Council before the close of the financial year ending 31st March, 1912.

*Committee of Agriculture and Technical Instruction.*

The Committee was appointed on the 12th June, 1911, and will cease to hold office on the 12th June, 1914. It consists of sixty-one members, of whom twenty-two are County Councillors, and thirty-nine added members.

*Chief Industries.*

Agriculture and allied industries, woollen manufacture.

*Object of the Scheme.*

The object of the Scheme is to provide, by means of itinerant courses, instruction in technological and domestic economy subjects.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Itinerant Instruction.
- III. Technical and Apprenticeship Scholarships for Boys.
- IV. General Conditions.

## I. FINANCE.

*A. Estimated Income:*

(1) Contribution from the County Council from rates levied over the Rural Districts in the financial year ending 31st March, 1912	..	..	£220
(2) Department's contribution from Endowment	..	..	250
Total.	..	..	£470

*B. Estimated Expenditure:*

(1) Salary of one Instructress in Domestic Economy	..	..	£115 0
(2) Salary of one Instructor in Manual Work	..	..	130 0
(3) Travelling Expenses of Itinerant Teachers	..	..	42 10
(4) Expenses of Classes in Manual Work and Domestic Economy including cost of Supplies, Rent of Rooms, Removal of Equipment, etc.	..	..	110 0
(5) Technical and Apprenticeship Scholarships for Boys	..	..	50 0
(6) General Administration Account	..	..	80 0
Total	..	..	£527 10

*C. Allocation of Accumulated Funds:*

Of the funds remaining unexpended from the working of the Scheme in previous sessions the sum of £57 10s. will be applied to meet the estimated deficit on the working of the Scheme for the present academic year. The remainder will be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

## II. ITINERANT INSTRUCTION.

Itinerant teachers of manual work and domestic economy will be employed throughout the session. The appointment of these teachers shall be subject to the following general conditions :—

(a) The itinerant teachers shall be under the control of the County Committee, and shall receive their instructions through the Secretary of the Committee.

(b) In centres where a course of instruction is being provided for the first time it will, in general, be desirable for the teachers to pay a preliminary visit in order to see that the proposed accommodation is suitable, and to confer with the local Committee with regard to arrangements for the courses.

(c) The teachers will, as a rule, be expected to give not less than four hours' actual teaching upon five days each week. (The general conditions for the employment of itinerant teachers are set forth in the Circular Letter No. 21, issued by the Department.)

(d) The Committee will submit, at the beginning of the session, to the Department, a time-table and itinerary, showing the proposed distribution of the time of the teachers for the session 1911-12. This general time-table and itinerary shall be arranged at a Committee meeting held after the date fixed for the return of the forms of application from the different centres in the county.

(e) The courses in domestic economy will, as a rule, be of six weeks' duration, lessons being given each day; but where it can be conveniently arranged the courses may run concurrently. In this case the duration of the course will be three months, half the time each week being devoted to one centre and half to the other.

(f) The salaries of the teachers are payable monthly.

## III. TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS FOR BOYS.

(1) Scholarships for Boys are awarded on the results of a competitive examination held annually. Boys who, during the preceding School Year, have been in regular attendance at one of the following schools will be eligible to compete, viz. :—

- (i) Primary Schools (only boys who have completed the course of the Sixth Standard of the National School Programme, or its equivalent, will be eligible to compete).
- (ii) Elementary Evening Schools conducted under the Rules and Regulations of the Commissioners of National Education.
- (iii) The Preparatory Course of Evening Technical Schools.

(2) The Scholarships will be of two kinds :—(a) Technical Scholarships, and (b) Apprenticeship Scholarships.

### (A)—TECHNICAL SCHOLARSHIPS.

*(Tenable only by Boys who shall have attained the age of 13 years on the 1st day of August in the year of examination.)*

These Scholarships are tenable at (1) approved Day Technical Schools, (2) approved Day 'Trades' Preparatory Schools, or (3) other Schools, the main object of which is the instruction of pupils of an industrial type and which may provide a course, exclusively followed by the pupils attending it, equivalent to that of a Day 'Trades' Preparatory School. The choice of the school will remain with the winner of the Scholarship or his parent (or guardian) subject to the approval of the Department.

There will be three classes of Technical Scholarships :—

- (i) Scholarships of the value of £5, tenable at schools within a radius of five miles from the home of the scholar.
- (ii) Scholarships of the value of £10, tenable at schools outside a radius of five miles from the home of the scholar; Scholar-

ships of this value are only awarded where there is no approved school of the type selected within a radius of five miles.

- (iii) Scholarships of the value of £20 to be granted to scholars whose attendance at an approved school will necessitate residence away from his home.

Scholars will be required to be in attendance at the school selected at the beginning of the School Year, and in any case not later than the 1st of October. The amount of the Scholarship will be paid in instalments to the parents or guardians of the scholar on or about the 15th October, 15th January, 15th April, and 15th July. The second and subsequent instalments will be paid only after satisfactory reports of attendance and progress have been received from the school authorities.

Scholarships will be tenable for one year, but may be renewed for a second and third year on the recommendation of the Department's Inspector.

Holders of these Scholarships will be eligible after attaining the age of sixteen years, for election without further examination by the Committee, on the recommendation of the Department, to an Apprenticeship Scholarship.

#### (B)—APPRENTICESHIP SCHOLARSHIPS.

*(Tenable only by Boys who have attained the age of 16 years.)*

These Scholarships are tenable during the period of apprenticeship to an approved trade extending over a period of five years. They may be awarded on the result of the annual Examination for Technical and Apprenticeship Scholarships, or in accordance with the terms of the preceding paragraph.

The choice of the trade to be followed will remain with the winner of the Scholarship, subject to the approval of the Department.

It will be a condition of tenure that the holder shall be duly indentured to a firm recognised by the Department for the purpose of these Scholarships, and under conditions which have been approved by them. The more important of these conditions are shown below.

It will also be a condition of tenure that the holder shall follow an approved course of study in an Evening Technical School or a Special Course of instruction for Apprentices organised under the Department's Programme for Technical Schools and Science and Art Schools and Classes, and Scholars must submit for the approval of the Department, a timetable of their proposed courses of study under these conditions. Scholars will be required to begin attendance at the approved course of study at the same time that they are admitted to apprenticeship.

Apprenticeship Scholarships are intended to provide a maintenance allowance during the period of Apprenticeship and their value for the period may be estimated at about £100. This will be paid in such sums as, together with the weekly wages paid by the employer, will amount to not less than 15s. per week throughout the period of Apprenticeship. As the rate of wages paid an apprentice commonly increases throughout the period of apprenticeship, beginning at a small sum in the first year, the amount to be provided by the Committee for the Scholarship will decrease in proportion.

The amount will be payable in such instalments as may be approved by the Department, regard being had to the special circumstances of each case.

Where an Apprenticeship premium is payable, the Department will be prepared, in approved cases, to provide for its payment.

(3) The Committee may, at any time, subject to the approval of the Department, determine a Scholarship, without notice, upon being satisfied that its continuance is, for any reason, undesirable.

(4) In the case of difficulties arising in connection with the award or retention of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

CONDITIONS REGULATING THE DEPARTMENT'S RECOGNITION OF  
INDENTURES.

(5) In selecting firms with whom scholars may be apprenticed, the Department will arrange that the following conditions shall be observed :—

- (i) Satisfactory arrangements to be made whereby the Apprentice Scholars will have an opportunity of learning all the various branches of their trade.
- (ii) In centres where provision is made for suitable Day Classes, Apprentice Scholars to be permitted to attend during working hours such classes as the Department may approve, the total number of hours so allowed not to exceed an average of eight hours weekly. The Apprentice Scholars to be paid for the time spent at these classes, but the total number of hours worked, including the hours of attendance at classes, shall not exceed that recognised in the particular trade as constituting a week's work.
- (iii) Where suitable Day Classes are not available, facilities to be given to Apprentice Scholars to attend a course of instruction in Evening Technical Schools or Classes, the working hours to be reduced by an equivalent number of hours, such reduction not to exceed a total of eight hours per week.
- (iv) The authorities of the school or classes which the Apprentice Scholar attends shall certify as to the number of hours during which the Scholar was present at the class each week, and on the production of such certificate, the Scholar shall be paid by the employer for the hours mentioned in the certificate.
- (v) The Department's Inspectors shall be entitled to visit the various places where the apprentices are employed at any time during working hours, and inquire into grievances or complaints that may be made either by the employer or the Apprentice Scholar.
- (vi) The Department shall have power to cancel the indenture and to terminate the Scholarship should the Apprentice prove unsatisfactory, or to transfer the Apprentice to another firm if for any reason it appears desirable to them to do so.

EXAMINATION FOR TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS,  
JUNE, 1912.

(6) The Examination will be held by the Department of Agriculture and Technical Instruction, on the 20th of June, 1912, at centres which will be fixed when all the applications have been received. The subjects and time-table of the examinations will be :—

*Arithmetic*.—Thursday, June 20th, 11 a.m. to 12.30 p.m.

The principles of Vulgar and Decimal Fractions, with examples involving addition, subtraction, and multiplication.

Proportion, Simple Interest, Practice, Unitary Method.

The Metric System.

Methods of Weighing and Measurement.

Measurement of lengths, areas, and volumes.

*English*.—Thursday, June 20th, 1 p.m. to 2.15 p.m.

Composition : A short essay or letter, of thirty or forty lines—with correct spelling, grammar, and punctuation—on some familiar subject.

Ability to answer, in fully-formed sentences, questions on the meaning of words and phrases, and on the matter of a passage read.

Grammar: The construction of words; prefixes, affixes, and roots.

Analysis of simple and complex sentences.

Correction of faulty sentences.

Paraphrasing a short poetical extract.

*Drawing*.—Thursday, June 20th, 2.30 p.m. to 3.30 p.m.

1. Freehand drawing.
2. Simple exercises in design.
3. Model drawing of simple common objects.
4. Simple geometrical drawing.

*Irish*.—Thursday, June 20th, 3.45 p.m. to 5.15 p.m.

1. *An Tarbh Breac. Tadhg Gabha*: with questions on grammar, etc., arising out of the texts.
2. A passage, or passages, from some other Irish text or texts for translation into English.
3. Short sentences, colloquial phrases, and a short passage for translation from English into Irish.

*Mathematics*.—Thursday, June 20th, 3.45 p.m. to 5.15 p.m.

Algebra.—Problems involving simple and simultaneous equations, fractions, factors, and square root.

Euclid.—Book I., with practical exercises on the problems.

Practical Geometry. Mensuration of rectilineal figures from diagrams drawn to scale.

Pupils will be required to draw and measure simple geometrical figures accurately.

Candidates may be examined on any part of these Syllabuses.

One hundred marks will be assigned for Arithmetic, one hundred for English, fifty for Drawing, and fifty for Irish or Mathematics.

(7) Only those candidates will be eligible for admission to the examination:—

- (a) Who will be over thirteen and under sixteen years of age on the 1st August, 1912.
- (b) Whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 1st June, 1912.

(8) Forms of application for admission to the examination may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 1st June.

(9) Successful candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(10) The Committee may refuse to award the full number of Scholarships offered for competition should a sufficient number of qualified candidates not show sufficient merit.

Early in the Academic Year, 1911-12, copies of the Scholarship Scheme shall be sent to all Schools eligible to present candidates, situated within the area administered by the Committee, and an advertisement of the Scheme and of the number of Scholarships to be competed for in June, shall be inserted once during the month of May in the newspapers circulating within this area.

#### IV. GENERAL CONDITIONS.

(See Section VII. Scheme for Co. Cork.)

## COUNTY WESTMEATH.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

The Scheme, subject to the provision requiring a local contribution from the rates (see Finance), is applicable to all the Rural Districts within the administrative area of the County Council.

Population of the area administered under the Scheme, 55,012; valuation, £315,510; value of 1d. rate, £1,315.

The local contribution from the rates will be paid over to the Committee by the County Council in instalments in April and December, 1911.

*County Committee of Agriculture and Technical Instruction.*

The Committee was appointed on the 13th June, 1911, and will cease to hold office on the 1st June, 1914. It consists of sixty-two members of whom thirty-one are County Councillors, and thirty-one added members.

*Chief Industries.*

The chief industries in the rural districts of the County are agriculture and allied industries.

*Objects of the Scheme.*

The objects of the Scheme are to provide, by maintaining a Technical School at Mullingar, and by means of itinerant instructors and scholarships, and by technical classes for girls, instruction in technological, commercial, domestic economy, and industrial subjects.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Itinerant Instruction.
- III. Technical School, Mullingar.
- IV. Technical Classes for Girls.
- V. Scholarships for Girls.
- VI. General Conditions.

## I. FINANCE.

*A. Estimated Income:*

(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1912 .. ..	£326
(2) Department's contribution from Endowment .. ..	450
(3) Contribution from the Athlone Urban District Technical Instruction Committee for the services of Domestic Economy Instructress .. .. .	25
Total .. ..	£801

*B. Estimated Expenditure:*

(1) Salary and Travelling Expenses of one Instructor in Manual Work. .. .. .	£170
(2) Expenses of Classes in Manual Instruction, including cost of Supplies, Rent of Rooms, Cost of Removal of equipment, etc. .. .. .	20
(3) Salaries and Expenses of three Instructresses in Domestic Economy .. .. .	350
(4) Salary of Commercial Instructor .. .. .	60

## (5) Technical School, Mullingar :—

(a) Provision for Preparatory Course Classes	£25	
(b) Scholarships .. .. .	30	
(c) Heating, Lighting, Class Materials ..	50	105
(6) Grants to Technical Classes for Girls* (see note below) ..		100
(7) Scholarships for Girls .. .. .		200
(8) General Administration Account .. ..		80
Total .. .. .		£1,085

\* NOTE.—The Committee may, subject to the approval of the Department, apply this sum or any portion thereof, to the direct employment of county teachers of industrial subjects, who may be transferred from district to district, as required.

*C. Allocation of Accumulated Funds :*

Of the funds remaining unexpended from the working of the Scheme in previous sessions, the sum of £284 will be appropriated to meet the estimated deficit on the work of the Scheme for the present academic year the remainder will be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

## II. ITINERANT INSTRUCTION

(a) The subjects to be taught will include manual work in wood, cookery, laundry-work, needle-work, and household management, with hygiene (if possible). The course of instruction in manual work will, as a rule, extend over six weeks, or, where two centres can be taken concurrently, three months. In either case the courses will be so arranged as to secure at least thirty lessons for each of two classes at each centre.

(b) The centres for these courses will be selected by the Committee, on consideration of the applications from all eligible centres, at the beginning of the session.

(c) In the case of the courses conducted by one of the Domestic Economy Instructresses, the Committee will rent a cottage in a populous district, preferably a district containing a number of labourers' cottages. The Instructress will reside in the cottage and conduct classes on certain days weekly for a fixed period—say ten or twelve weeks. The cottage will be furnished with essentials only and in keeping with the requirements of a cottage of its class. It will be managed so as to show how a household may be conducted on limited resources. The time of the Instructress which is not occupied in classwork at the cottage will be devoted to making house to house visits in the neighbourhood with a view to affording such information on practical subjects as the circumstances of cases may suggest, special attention being given to practical demonstrations in the proper use of such utensils and food materials as are available in the majority of cottages.

The number of students admitted to a class held at the cottage in which the Instructress resides should not exceed eight or ten. The necessary furniture will be hired or purchased by the Committee.

(d) One of the teachers of domestic economy shall be available for the Residential School of Domestic Training at the Convent of Mercy, Moate, so far as to comply with the provisions laid down in Section V. B. (2) of this Scheme.

(e) The salaries of itinerant teachers shall be paid monthly, and shall constitute a first charge on the funds of the Committee.

(f) Salaries, allowances, and conditions of employment of itinerant teachers are set forth generally in the Department's Circular Letter, No. 21.



### III. TECHNICAL SCHOOL, MULLINGAR.

The Committee will provide suitable premises for permanent classes at Mullingar. Classes will be conducted in English, elementary mathematics, and elementary drawing of the Preparatory Course; in manual work, practical mathematics, and mechanical drawing; in commercial subjects, and in domestic economy.

The classes will be under the general supervision of the manual instructor as headmaster, and his duties will be:—

1. To conduct classes at Mullingar on two nights in each week, in addition to classes at itinerant centres when not engaged at Mullingar.
2. To take general charge of the registration of students, and the arrangement of time-tables and classes in the Technical School, Mullingar.
3. To be responsible for the equipment of all classes in the Technical School.
4. To furnish monthly reports of the working of the Technical School to the County Committee.
5. To supply, through the Secretary to the County Committee, such information and returns as the Department may, from time to time, require.

A duly qualified teacher in subjects of the Preparatory Course will be engaged by the Committee, and a sum of £25 is provided to defray the teacher's salary and other expenses incidental to the classes.

Classes in commercial subjects will be conducted on two nights each week by a teacher engaged by the Committee.

In order to encourage the attendance of suitable pupils at the Technical School a sum of £30 is provided for the award of Scholarships during the present session as follows:—

#### CLASS A. PREPARATORY COURSE.—TWELVE SCHOLARSHIPS OF 10s. EACH.

These Scholarships will be awarded to the twelve candidates who obtain highest places at the entrance examination in English, Mathematics and Drawing.

#### CLASS B. FIRST YEAR OF SPECIALISATION.—SIX SCHOLARSHIPS OF £2 EACH.

These Scholarships will be awarded to the six candidates who obtain highest marks at the examination for entrance to Specialised Courses. Three of the Scholarships may be confined to pupils who attended the Preparatory Course satisfactorily.

#### CLASS C. SECOND YEAR OF SPECIALISATION.—FOUR SCHOLARSHIPS OF £3 EACH.

These Scholarships will be awarded to the four candidates who obtain highest marks in any three subjects of a First Year of Specialisation.

#### CONDITIONS.

- (1) Pupils on the roll of a National School are ineligible for Scholarships.
- (2) The Scholarships will entitle the holders to free tuition at an approved course during the session.
- (3) The amounts of the Scholarships will be paid in three instalments—the first on the enrolment of the scholar, and the subsequent instalments after Christmas and at the end of the session. The second and final instalments will be paid only upon receipt of reports of satisfactory attendance and progress from the Principal.

## IV. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, capitation grants at the rate of £3 per pupil for any number not exceeding ten, and at the rate of £2 per pupil for the remainder of the class, will be paid in respect of the attendance of girls at instruction in lace-making, crochet-making, needlework, sprigging, embroidery, drawn thread-work, shirt-making, or such other industrial or domestic subject as may, from time to time, be approved by the Department.

In certain industrial subjects, such as lace-making, a knowledge of drawing is of great value to the worker. Where provision can be made for efficient instruction in drawing, a further grant of 10s. per pupil may be paid in respect of those girls who have qualified for the grant referred to in the foregoing paragraph, and have received not less than forty hours' instruction in Drawing.

*General Conditions for the Conduct of Classes and Payment of Grants.*

(See Section III. Scheme for Co. Cork.)

## V. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1912, award a limited number of Scholarships to girls who have received an education equivalent to that of the Fifth Standard of a National School, to enable them to attend a regular course of instruction and training in domestic economy. The object of such Scholarships is to cultivate intelligence and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at residential schools of domestic training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a Fee of £2 to the managers of the school on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the school managers will entitle the scholar to board, residence, and training for one academic year.

*A. General Conditions Regulating the Award of the Scholarships.*

(1) The Scholarships will be tenable only by girls:—

- (a) Who are over sixteen and under twenty-five years of age on the 1st of June, 1912; and
- (b) Whose parents or guardians have been resident in the area administered by the Committee for at least one year immediately preceding the 1st of June, 1912.

(2) The selection of the scholars will be made by a Selection Committee of the County Committee.

(3) Forms of application for Scholarships may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 1st of June. Each application must be accompanied by not less than two testimonials, one of which must be from a local clergyman, and one from a District or County Councillor.

(4) Selected candidates will be required to furnish, for the inspection of the County Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(5) Selected candidates shall enter the Residential School for a fortnight on probation. Any candidates found unsuitable to undergo the course of training will, at the expiration of the period of probation, be required to leave, and their places shall be filled by selection from the other qualified candidates. The fee to the school managers shall be

refunded to those scholars who are required to leave the school under these conditions.

(6) The amount of the Scholarships will be paid to the managers of the schools in two half-yearly instalments, one on or about the 31st January, the other on or about the 31st July. Payment of these instalments will be authorised by the Department on receipt of satisfactory reports from their Inspectors.

(7) All Scholarships shall terminate on the 31st July, 1913.

(8) The Committee may refuse to award the full number of Scholarships should a sufficient number of suitable candidates not be forthcoming, and they may determine a Scholarship at any time, without notice, upon being satisfied that its continuance is for any reason undesirable.

(9) In the case of difficulties arising in connection with the awarding or holding of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

An advertisement of the Scholarship Scheme will be inserted once, early in the month of May, in the newspapers circulating within the area administered by the Committee.

#### *B. Conditions Regulating the Recognition of Residential Schools of Domestic Training.*

(1) In order that a Residential School of Domestic Training may be recognised by the Department under this Scheme, the managers must provide a satisfactory course of instruction in the following subjects:—

Household Management (including the keeping of accounts).

Cookery (including the selection of menus for small incomes).

Needlework (repairing, adapting, and dressmaking).

Laundry-work.

Hygiene (including sick nursing and the care of the young).

At least thirty hours per week must be devoted to the foregoing subjects.

The curriculum may also include one or more of the following subjects if adequate provision is made for both practical and theoretical instruction:—

Dairy-work.

Poultry-rearing.

Bee-keeping.

Horticulture.

(2) There must be on the staff of the school a certificated teacher of Domestic Science, who devotes at least thirty hours per week to the instruction of residential pupils. If the number of pupils exceed 18, there must be one such teacher for each 18, or fraction of 18, pupils.

(3) The school managers must satisfy the Department that the dormitory accommodation, and other provisions, of the school are adequate and satisfactory.

(4) Within a fortnight after the re-opening of the school in any year, the managers must forward to the Department the complete time-table on Form S.148, copies of which will be furnished by the Department upon application. This time-table will show the distribution of time to the various subjects of the course, and must receive the written approval of the Department.

(5) The school shall be at all times open to the Inspectors of the Department.

#### VI. GENERAL CONDITIONS.

(See Section VII. Scheme for Co. Cork.)

## URBAN AND RURAL DISTRICTS OF TIPPERARY.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

*Chief Industry.—Dairying.*

Population of the area administered under the Scheme:—Urban, 6,281; Rural, 18,895; total, 25,176.

Valuation of the area administered under the Scheme:—Urban, £10,564; Rural, £106,504; total, £117,168.

Value of 1d. rate:—Urban, £44; Rural, £444; total, £488.

The local contributions from the rates (Urban and Rural) will be paid over to the Committee before the close of the financial year ending 31st March, 1912.

*Technical Instruction Committee.*

The Committee is a Joint Committee of the Tipperary Urban District Council and the Tipperary Rural District Council. It consists of thirty members, of whom twelve are Councillors, and eighteen added members.

*Objects of the Scheme.*

The objects of the Scheme are to provide, by means of evening classes and short courses of instruction in the rural districts, instruction in science, technological, domestic economy, and commercial subjects for persons engaged in various occupations during the day.

*Premises.*

There is, at present, no Central Technical School, but the erection of such a school is in contemplation. Classes, in the meantime, are held at the Christian Brothers' Schools, the Convent of Mercy, and at the National School, in addition to the various itinerant courses of instruction organised throughout the Rural District.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. Instruction in Glove-making.
- IV. Technical and Apprenticeship Scholarships for Boys.
- V. Scholarships for Girls.
- VI. General Conditions.

## I. FINANCE.

## A. Estimated Income:

(1) Contribution from the County Council from rates levied over the Rural District in the financial year ending the 31st March, 1912.	..	..	£221
(2) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the financial year ending the 31st March, 1912)	..	..	49
(3) Contributions from the Department:—			
(a) From Endowment	..	..	£450
(b) Grants for Instruction in Science, Art, etc., and in aid of the Scholarship Fund	..	..	120
(4) Students' Fees and Sales of Materials	..	..	570
			10
Total	..	..	£850

*B. Estimated Expenditure :*

(1) Salary of Manual Instructor .. .. .	£130
(2) Travelling Expenses of Manual Instructor .. .. .	30
(3) Salary of Domestic Economy Instructress .. .. .	130
(4) Salaries of other Teachers (one of whom also acts as Assistant Secretary at a Salary of £12 per annum) .. .. .	110
(5) Salary of Secretary .. .. .	50
(6) Allowance to the Managers of the Convent of Mercy, Tipperary .. .. .	15
(7) Scholarships for Boys .. .. .	57
(8) Residential Schools of Domestic Training :—	
(a) Two Scholarships of £15 each .. .. .	£30
(b) Allowance in respect of Expert Instruction for Scholarship Holders at £5 per Scholar .. .. .	10
	<hr/>
(9) Rent of Rooms at Christian Brothers' Schools .. .. .	40
(10) Allowance to the Managers of the Christian Brothers' Schools for Superintendence, etc., of Evening Classes at Central Schools .. .. .	15
(11) Salary of Teacher of Glove-making .. .. .	50
(12) Prizes for Students in Technical Classes .. .. .	12
(13) Diplomas for Students in glove-making Classes .. .. .	2
(14) Travelling Expenses not provided for in the foregoing allocations, administrative and incidental expenses, and for such Industrial Teaching as may be approved .. .. .	194
	<hr/>
Total .. .. .	£850

*C. Allocation of Accumulated Funds :*

The funds remaining unexpended from the working of the Scheme in previous sessions may be applied in providing equipment, as a reserve fund for building, and for such other purposes as the Committee, with the approval of the Department, may, from time to time, determine.

## II. SUBJECTS OF INSTRUCTION.

*Commercial Subjects :*

Shorthand, typewriting, book-keeping, commercial arithmetic, and business methods.

*Science (Pure and Applied) :*

Building construction, glove-making.

*Handicraft :*

Manual instruction.

*Domestic Science :*

Cookery, laundry-work, dressmaking and housewifery.

## III. INSTRUCTION IN GLOVE-MAKING.

(1) The Committee will pay the salary of a teacher of glove-making, who will give instruction in this subject in the Rural District.

(2) The teacher will be selected by Messrs. Fownes, Brothers & Co., of Worcester, by whom the work of the classes will be supervised.

(3) The centres at which instruction will be given will be selected by the Committee.

## V. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1912, award two Scholarships to girls who have received a satisfactory primary education, to enable them to

attend a regular course of instruction and training in Domestic Economy. The object of these Scholarships is to cultivate intelligence, thrift and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at the Domestic Training Institute, Charlemont Street, Dublin, or other residential Schools of Domestic Training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a fee of £2 to the managers of the School on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the School Managers, will entitle the scholar to board, residence, and training for one academic year.

*For General Conditions regulating the award of Scholarships and conditions regulating the recognition of Residential Schools of Domestic Training, see Section V., Scheme for Co. Westmeath.*

## VI. GENERAL CONDITIONS.

*(See Section VII., Scheme for Co. Cork.)*

## URBAN DISTRICT OF BALLYMENA.

### TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

#### *Chief Industries.*

Spinning, weaving, boot and shoe manufacture, coach-building, engineering, collar and cuff making, mining (near the town), pork-curing. Important market centre.

Population, 10,886; valuation, £34,536; value of 1d. rate, £144. The local contribution from the rates will be paid over to the Committee in two instalments on the 1st October, 1911, and 1st March, 1912.

#### *Technical Instruction Committee.*

The Committee was appointed on the 23rd January, 1911, and will cease to hold office on the 23rd January, 1914. There are nine members, of whom five are Urban District Councillors, and four added members.

#### *Objects of the Scheme.*

The objects of the Scheme are to improve the industries of the neighbourhood by means of the Central Technical School, in which are taught subjects having a direct or indirect bearing on the welfare of the trades and occupations of the town and district.

#### *Premises.*

The Technical School is situated in Galgorm Street, Ballymena, and contains the following class-rooms:—combined science lecture-room and laboratory (with dark room), woodwork room, commercial class-room, domestic science room (with scullery), engine and dynamo room, mechanical drawing room, art room, modelling room, typewriting room, mechanical laboratory.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction in the Technical School.
- III. Day Trades Preparatory School.
- IV. General Conditions.

## I. FINANCE.

*A. Estimated Income :*

(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the Financial year ending the 31st March, 1912)	..	..	£130
(2) Students' Fees	..	..	100
(3) Subscriptions to Scholarship and Prize Fund	..	..	3
(4) Contributions from the Department :—			
(a) From Endowment	..	..	520
(b) Grants for Instruction in Science, Art, etc.	..	..	790
(c) Grant towards the maintenance of the Day Trades Preparatory School (estimated).	..	..	120
(5) Sale of Books, Class Materials, etc.	..	..	5
(6) From Examination Fees	..	..	7
Total	..	..	£1,675

*B. Estimated Expenditure :*

(1) Salary of Principal	..	..	£360
(2) Salaries of other Teachers	..	..	664
(3) Scholarships and Prizes	..	..	42
(4) Caretaker's Wages	..	..	36
(5) Fuel, Light and Cleaning	..	..	45
(6) Rents and Insurance	..	..	92
(7) Equipment (new and renewals)	..	..	80
(8) Class Materials	..	..	35
(9) Repairs to Premises, Grounds, etc.	..	..	250
(10) Printing, Stationery and Advertising	..	..	50
(11) Incidental Expenses (including salary of Secretary, £35)	..	..	76
Total	..	..	£1,730

*C. Allocation of Accumulated Funds :*

Of the funds remaining unexpended from the working of the Scheme in previous sessions, the sum of £55 will be appropriated to meet the estimated deficit on the working of the Scheme for the present session. The remainder will be applied for such other purposes as the Committee, with the approval of the Department may, from time to time, determine.

## II. SUBJECTS OF INSTRUCTION.

*Commercial Subjects :*

Shorthand, typewriting and commercial correspondence, office routine, book-keeping, commercial arithmetic, elementary economics, commercial law, commercial geography, banking and currency.

*Language :*

French.

*Mathematics :*

Mensuration and technical arithmetic, practical mathematics, practical geometry.

*Science (Pure and Applied) :*

Building construction and drawing, carpentry and joinery, machine construction and drawing, heat and heat engines, experimental mechanics, electric lighting, mechanical engineering, chemistry, properties of materials, graphic statics.

*Handicraft :*

Manual instruction in wood and in metal, wood-carving and other ornamental work in wood.

*Domestic Science :*

Cookery, laundry-work, home sewing and dressmaking, hygiene, housewifery, ambulance work, sick nursing.

*Art Subjects :*

Freehand, model, and geometrical drawing, drawing in light and shade, black-board drawing, brushwork, design, elementary modelling.

## III. DAY TRADES PREPARATORY SCHOOL.

The Day Trades Preparatory School is conducted at the Municipal Technical School. The aim of this school is to provide for boys over thirteen years of age, who have received an education equivalent to that of the Sixth Standard of a National School, such a course of training as will fit them to enter upon an industrial career.

The course of instruction will extend over three years, and will include experimental science and drawing, mathematics, manual instruction, practical geometry, and literary subjects, with one modern language besides English.

The Department will bear three-fourths of the approved net annual cost of maintaining the school. The proportion of the expenditure admitted for payment by the Department may be increased by one-tenth if the Department, after consideration of their Inspector's reports, are of opinion that the organisation and teaching justify such a course, or it may be reduced by one or more tenths if the organisation or teaching is considered unsatisfactory.

## IV. GENERAL CONDITIONS.

(See Section VII., Scheme for Co. Cork.)

## URBAN DISTRICT OF RATHMINES AND RATHGAR.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1911, to 31st July, 1912.

*Chief Industries.*

Commercial pursuits, laundry-work.

Population, 32,602. Valuation, £177,906. Value of 1d. rate, £741.

The local contribution from rates will be paid over to the Committee before the close of the financial year ending 31st March, 1912.

*Technical Instruction Committee.*

The Committee was appointed on the 23rd January, 1911, and will cease to hold office on the 23rd January, 1914. It consists of fifteen members, of whom nine are Urban District Councillors, and six added members.

*Objects of the Scheme.*

The objects of the Scheme are to provide instruction in commercial subjects by means of a School of Commerce, and in Domestic Economy Subjects by means of a School of Domestic Training.

*Premises.*

The School of Commerce is situated at 24 Rathmines Road, Co. Dublin, and contains ten class-rooms.

The School of Domestic Economy is situated at 52a Upper Rathmines, and contains one class-room.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Subjects of Instruction.
- III. General Conditions.



## I. FINANCE.

## A. Estimated Income :

## 1. SCHOOL OF COMMERCE.

(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the Financial year ending 31st March, 1912) .. .. .	£759
(2) Contributions from the Department :—	
(a) From Endowment .. .. .	£1,000
(b) Grants for instruction in Science, Art, etc. (estimated) .. .. .	300
	<hr/>
(3) Students' Fees .. .. .	220
	<hr/>
Total .. .. .	£2,279

## 2. SCHOOL OF DOMESTIC ECONOMY.

(1) Contributions from the Department :—	
(a) From Endowment .. .. .	£250
(b) Grants for instruction in Science, Art, etc., .. .. .	50
(2) Students' Fees and Sales .. .. .	120
	<hr/>
	420
	<hr/>
Total .. .. .	£2,699

## B. Estimated Expenditure :

## 1. SCHOOL OF COMMERCE.

(1) Salary of Principal .. .. .	£414
(2) Salaries of other Teachers .. .. .	1,116
(3) Examinations for School Certificates .. .. .	60
(4) Caretaker's Wages .. .. .	52
(5) Fuel, Light and Cleaning .. .. .	76
(6) Rents and Insurance .. .. .	83
(7) Class Materials .. .. .	5
(8) Equipment, including Additions to Library .. .. .	248
(9) Repairs to Premises .. .. .	10
(10) Administrative and incidental Expenses :—	
(a) Salary of Secretary .. .. .	£50
(b) Printing, Stationery and Advertising .. .. .	90
(c) Clerical Assistance .. .. .	35
(d) Office Expenses .. .. .	10
(e) Deputation Expenses .. .. .	10
(f) Sundries .. .. .	20
	<hr/>
	215
	<hr/>
Total .. .. .	£2,279

## 2. SCHOOL OF DOMESTIC ECONOMY.

(1) Salary of Chief Instructress .. .. .	110
(2) Salary of Assistant Instructress .. .. .	65
(3) Caretaker's Wages .. .. .	55
(4) Fuel, Light and Cleaning .. .. .	25
(5) Rent and Insurance .. .. .	40
(6) Equipment .. .. .	40
(7) Class Materials .. .. .	45
(8) Printing, Stationery and Advertising .. .. .	40
	<hr/>
	420
	<hr/>
Total .. .. .	£2,699

## II. SUBJECTS OF INSTRUCTION.

### (1) SCHOOL OF COMMERCE.

*Preparatory Course :*

English, arithmetic, and drawing.

*Commercial Subjects :*

Shorthand, typewriting, book-keeping, English correspondence, business methods, commercial arithmetic.

*Languages :*

French, German.

*Mathematics :*

Bankers' arithmetic and algebra.

*Higher Commercial Subjects :*

Advanced book-keeping and accountancy, company procedure and accounts, auditing, economics, commercial geography, commercial law, practical banking and finance, merchandise traffic and station accounts, audit office work, coaching traffic, railway signalling and block working, work of railway chief offices, railway economics and geography, railways and the State, building construction and plan drawing, fire insurance theory and practice including the law of fire insurance, life assurance theory practice and law, accident insurance practice and law.

### (2) SCHOOL OF DOMESTIC ECONOMY.

Cookery, laundry-work, dressmaking and home sewing, household management, hygiene and sick nursing.

## III. GENERAL CONDITIONS.

(See Section VII., Scheme for Co. Cork.)

### CONDITIONS OF AWARD OF SCHOLARSHIPS OFFERED FOR COMPETITION BY THE DEPARTMENT.

*Under Revision.*

Form S. 2,

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

#### METROPOLITAN SCHOOL OF ART, DUBLIN.

#### TEACHERSHIPS-IN-TRAINING, 1911.

The Department will offer for competition, at the beginning of the Session 1911-12, three Teacherships-in-Training tenable at the Metropolitan School of Art, Dublin. One will be open to competition amongst male candidates only, and one amongst female candidates only; the third will be open to competition amongst both male and female candidates.

The object of the Teacherships-in-Training is to encourage capable Art students to undertake such a course of training as will enable them to become Art Teachers.

The Teacherships-in-Training will entitle the holders to free admission to all the day and evening classes at the Metropolitan School of Art for

the Session 1911-12; a maintenance allowance of 21s. per week during the Session (about forty weeks); and third-class railway fare for one journey to and from Dublin.

The Teacherships will be awarded partly as the result of an examination, and partly for works submitted according to the conditions stated below.

The examination will be confined to Art subjects, and will be held at the Metropolitan School of Art, Dublin, on Tuesday, Wednesday, and Thursday, the 27th, 28th, and 29th June, 1911.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Candidates who have held Scholarships at the Metropolitan School of Art extending over more than one School Session will not be eligible for the award of Teacherships-in-Training.

Teacherships will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Metropolitan School of Art, and in particular, candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible. In awarding the Teacherships preference will be given to candidates who possess the Art Class Teachers' Certificate (Board of Education), or the Irish Secondary Teachers' Honours Drawing Certificate.

The award will be made on the following conditions:—

(1.) Candidates must be not less than eighteen and not more than thirty years of age on the 1st September, 1911. The Department may allow a modification of this rule in special cases.

(2.) Successful candidates will be required to furnish a medical certificate of health, an authenticated copy of certificate of birth, and satisfactory testimonials from two responsible persons.

(3.) Candidates must satisfy the Department that they have had a good general education.

(4.) Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st September, 1911.

(5.) Successful candidates will be required to prepare, in conjunction with the Headmaster of the School, a scheme of study; and to submit it for the Department's approval. They will be required to devote their whole time to the work of the scheme; to attend regularly and punctually; and generally to comply with the regulations set out in the programme of the Metropolitan School of Art. They must be prepared, if required, as part of their training, to undertake such work as teachers as the Headmaster may prescribe.

(6.) The Teacherships may be renewed for a second Session. Renewal will depend upon the ability and application shown by the student during the previous Session, and on the scheme of study proposed by the student when applying for a renewal for a second Session.

(7.) The Department reserve the right at any time to determine, without notice, any Teachership upon being satisfied that its continuance is for any reason undesirable.

(8.) The decision of the Department in all questions arising in connection with Teacherships shall be final.

(9.) The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

The names of the candidates must be forwarded, on Form S. 3, so as to reach the Offices of the Department not later than the 29th April, 1911. Applications for forms are not regarded as applications for admission to the examination. Only those candidates who present an official acknowledgment of the form of application will be admitted to the examination room.

Copies of Form S. 3 may be obtained, after 1st February, 1911, upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, or to the Registrar, Metropolitan School of Art, Kildare Street, Dublin.

## SUBJECTS OF EXAMINATION.

The subjects and time-table of the examination will be :—

*First Day, Tuesday, June 27th—*

10 a.m. to 2 p.m.—Drawing from the Antiqua. (100 marks.)

3 to 5.30 p.m.—Model Drawing. (50 marks.)

*Second Day, Wednesday, June 28th—*

10 a.m. to 1 p.m.—Drawing in Light and Shade from a Cast. (50 marks.)

2 to 6 p.m.—Drawing, or Modelling, Design. (100 marks.)

*Third Day, Thursday, June 29th—*

11 a.m. to 1.30 p.m.—Principles of Ornament. (100 marks.)

2.30 to 4.30 p.m.—Perspective. (50 marks.)

4.45 to 5.45 p.m.—Drawing on the Blackboard. (50 marks.)

For syllabuses of the subjects of examination, see "Syllabuses and Lists of Apparatus" of the Board of Education, to be obtained (price 4d.), either directly, or through any bookseller, of Mr. E. Ponsonby, 116 Grafton Street, Dublin.

## WORKS.

In order to encourage Art students to devote much attention to what should be the primary aim of their higher instruction, namely, the application of their skill, experience, and good taste to works requiring more time and care than the ordinary conditions of an examination room permit, marks, to a maximum of 225, will be awarded for works of the same character as those proposed for the Irish Secondary Teachers' Honours Drawing Certificate. (*See extract below.*)

Works to be submitted for the competition must be delivered at the Metropolitan School of Art, Dublin, on or before Saturday, the 24th June, 1911. They should be addressed, "The Registrar, Metropolitan School of Art, Dublin," and should be specially marked, "Works, Teacherships-in-Training."

*Extract from Circular 16 (Irish Secondary Teachers' Drawing Certificate).*

## WORKS.

(1.) "An imperial sheet of three designs, based on a study in colour of a growing plant. The plant should be drawn from nature simply and directly—not pictorially represented. Such details of the plant as the student may select for the purposes of the designs should, if required, be drawn separately.

"The designs must occupy, in a decorative way, a square, a circle, and an oblong, one being in monochrome, one in two colours, and one in polychrome. At least one of the designs must be executed in body colour or tempera. In each case, the plant must be not merely applied to the given space, but treated in accordance with decorative conditions.

(2.) "A modelled study of a flowering plant, with three distinctly different modelled designs for patterns based on it. Each of these three different designs must be suited to the technical requirements of three different processes of manufacture. The process and material for which it is intended must be named on each design. The four studies to be on a panel 30 inches by 22 inches.

(3.) (a.) "A shaded drawing of a complete human figure from the Antiqua or from Life; or

(b.) "Shaded drawings of a head, hand and foot, from the Life, full size; completely finished in pencil, chalk, or brush in monochrome; or

(c.) "A modelled figure in the round, 30 inches high, from the Antiqua or from Life; or

(d.) "A modelled head, from Life, full size."

Under Revision.

Form S. 33.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

ROYAL COLLEGE OF SCIENCE, DUBLIN.

SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS, 1911.

A limited number of Scholarships and of Teacherships-in-Training, tenable at the Royal College of Science, Dublin, will be offered for competition among Students of Science and Technology in 1911.

The Scholarships are of the value of £50 per annum and, in addition, entitle the holder to free instruction during the Associate Course, and third-class railway fare for one journey each session to and from Dublin.

A Teachership-in-Training entitles the holder to free instruction during the Associate Course, a maintenance allowance of 21s. per week for the session of about forty weeks each year, and third-class railway fare for one journey each session to and from Dublin.

Candidates awarded Teacherships-in-Training will be required to enter into an undertaking that they will pursue the full Associate Course, with a view to becoming Teachers of Science in Ireland, and that, in the event of their leaving the College before obtaining the Diploma of Associateship, they will refund to the Department the sums paid to them as maintenance allowances and expenses of travelling.

Holders of Scholarships and Teacherships-in-Training who may seek leave of absence from attendance at the College in order to attend examinations for Scholarships in other Institutions, will be required to first pay the College Fee for the current term.

The Associate Course extends over three years, and the College Session lasts from the beginning of October until the end of June each year.

Holders of Scholarships and Teacherships-in-Training will be required to devote their whole time to the work of the Associate Course, to comply with the Regulations of the College, and to pass the examinations required for the Associateship. The continuance of the Scholarship or Teachership-in-Training for a second or a third session will depend upon the ability and application which the Student has shown during the previous session or sessions at the College.

Candidates for Scholarships and Teacherships-in-Training must be not less than sixteen nor more than thirty years of age on the 1st June, 1911. Holders of Royal Exhibitions or National Scholarships, and present or past Students of the Royal College of Science, are ineligible as candidates.

Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st June, 1911.

Candidates will have to satisfy the Department as to their knowledge of English and of one other language (Greek, Latin, Irish, French, or German). In these subjects, a pass in the Middle Grade of the Intermediate Education Board's Examinations, in the First Arts Examination of the Royal University of Ireland, or the equivalent of these, will be accepted as satisfactory. Those candidates who cannot thus satisfy the Department as to their knowledge of the qualifying subjects will be examined on the Pass Courses for the Middle Grade of the Intermediate Education Board's Examinations of 1911.

The competition will be confined to Mathematics, Experimental Science and Drawing.

The Syllabus in Mathematics will be the *Honours* Courses in Arithmetic, Geometry, Algebra and Trigonometry for the Senior Grade of the Intermediate Education Board's Examinations of 1911.

In Experimental Science, candidates will be allowed the choice of one of the following subjects of the Special Courses of Experimental Science of the Department's Programme for Day Secondary Schools:—Physics, Chemistry, Mechanical Science, Botany, Physiology and Hygiene. The exam-

ination may, however, include any of the work of the Two Year Preliminary Course.

The Syllabus in Drawing will be the First and Second Year Syllabuses of the Programme for Day Secondary Schools.

NOTE.—Text Books, other than those referred to in the Syllabuses, are not prescribed for the examinations.

The examination will be held in Dublin on the days and at the hours shown below :—

*Monday, 3rd July.*—Experimental Science (Practical Examination), 10 a.m.-1 p.m.; Drawing, 2 p.m.-5.10 p.m.

*Tuesday, 4th July.*—Mathematics (First Paper), 10 a.m.-1 p.m.; Experimental Science (Written Examination), 2 p.m.-5 p.m.

*Wednesday, 5th July.*—Mathematics (Second Paper), 10 a.m.-1 p.m.; English, 2 p.m.-5 p.m.

*Thursday, 6th July.*—Greek, Latin, Irish, French or German, 10 a.m.-1 p.m.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Scholarships or Teacherships-in-Training will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Royal College of Science. Candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible for Teacherships-in-Training.

Successful candidates will be required to furnish a Medical Certificate of Health, an authenticated copy of Certificate of Birth, and satisfactory testimonials from two responsible persons.

The Department reserve the right at any time to determine without notice a Scholarship or Teachership-in-Training, upon being satisfied that its continuance is for any reason undesirable.

The decision of the Department in all questions arising in connection with the Scholarships and Teacherships-in-Training shall be final.

The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

Applications for admission to the examination must be made, not later than the 29th April, on Form S. 34, copies of which may be obtained, after the 1st February, 1911, upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin, or to the Registrar, Royal College of Science, St. Stephen's Green East, Dublin.

Applications received after the 29th April will be too late for consideration. Applications for Forms are not regarded as applications for admission to the examination. Only those candidates who present an official acceptance of the Form of Application will be admitted to the Examination Room.

*Under Revision.*

FORM S. 190.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

### INDUSTRIAL SCHOLARSHIPS, 1910.

The Department will, in August, 1910, award not more than six Industrial Scholarships to persons engaged in industries, such as the Woollen, Linen, Leather, and Tanning industries.

The object of these Scholarships is to enable selected persons, who must already have been engaged in one of the higher branches of the industry, to take a full course of instruction in an institution providing special courses of an approved character, with a view to training them for the management of such an industry. Candidates will be required to show that there is a reasonable expectation of their being able to find suitable employment in the industry in Ireland after the termination of their Scholarships.

The Scholarships will be tenable at some higher institution, to be approved by the Department, in which the industry, and the principles underlying it, are taught. They will be of the value of £80 each, and may be renewed for a second or a third year at the discretion of the Department.

The Scholarship holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st July, 1910.

Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates, or to any other question arising out of these Scholarships, will be final.

Candidates must fill in and return, addressed to the Secretary of the Department, not later than the 30th June, 1910, Form S. 191, copies of which may be had on application.

*Under Revision.*

Form S. 194.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

### COMMERCIAL SCHOLARSHIPS, 1910.

The Department will, in August, 1910, award not more than six Commercial Scholarships to young men having a sound general education, and some commercial experience.

The object of the Scholarships is to afford facilities for the holders' obtaining training in some higher Institution, approved by the Department, with a view to their employment as teachers of Commercial Subjects in Ireland.

The Scholarships are of the value of £100 each, and are tenable for two years. The Department, however, reserve the right to determine a Scholarship at any time within this period upon being satisfied that its continuance is for any reason undesirable.

The Scholarship holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must be at least twenty-one years of age on the 1st July, 1910, and must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st July, 1910.

Successful candidates will be required to enter into an undertaking that they will engage in the teaching of Commercial subjects after the termination of their Scholarships.

Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates, or to any other question arising out of these Scholarships, will be final.

Candidates must fill in and return, addressed to the Secretary of the Department, not later than the 30th June, 1910, Form S. 195, copies of which may be had on application.

*Under Revision.*

Form S. 196.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

### TRAINING OF TEACHERS OF CROCHET-WORK AND SPRIGGING.

The Department will, in September, 1911, award not more than three Scholarships, tenable at the Training School for Lace and Sprigging Teachers, Enniskillen, to girls having a satisfactory general education, and some proficiency in Crochet-work or Sprigging.

These Scholarships are granted to enable the holders to secure training as teachers of Crochet-work or Sprigging.

The Scholarships will be of the value of £25 each, and will be tenable for one year. The Department reserve the right to determine a Scholarship at any time upon being satisfied that its continuance is for any reason undesirable.

Each candidate for a Scholarship will be required to submit to the Department with the form of application, specimens of her work in either Crochet-work or Sprigging.

Should the work submitted be regarded as of a satisfactory standard, the candidate will be admitted to an examination which will consist of simple tests in English, Arithmetic, Drawing and Crochet-work or Sprigging.

The Scholarship will be awarded as a result of the examination. (Not more than one Scholarship will be awarded in the case of candidates from any one County.)

The examination will be held at the Metropolitan School of Art, Dublin, and at the Technical School, Enniskillen, on the following dates:—

Dublin:—Crochet-work or Sprigging, on Tuesday, 12th September.

English, Arithmetic and Drawing, on Wednesday, 13th September.

Enniskillen:—English, Arithmetic and Drawing, on Wednesday, 13th September.

Crochet-work or Sprigging, on Thursday, 14th September.

Candidates will be required to defray their own expenses in attending the examination.

Candidates must be at least 20 years of age on the 1st September, 1911, and must have been born in Ireland or have resided in the country for three years immediately preceding that date.

Two Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates or to any other question arising out of these Scholarships will be final.

Applicants must fill in and return, addressed to the Secretary of the Department, Form S. 197, copies of which may be had on application, together with specimens of work in Crochet or Sprigging. (Two specimens of finished work, and two specimens of work in progress should be furnished.)

Only those applications received at the Offices of the Department by 12 noon on Saturday, August 26th, 1911, will be taken into consideration.

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## RESULTS OF COMPETITIONS FOR SCHOLARSHIPS OFFERED BY THE DEPARTMENT DURING 1911.

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### SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS AND TEACHER- SHIPS-IN-TRAINING.

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At the annual examination held on the 3rd, 4th, 5th, and 6th July, 1911, for Science and Technological Scholarships and Teacherships-in-Training, tenable at the Royal College of Science, Dublin, thirty-nine candidates presented themselves.

Five Scholarships and five Teacherships-in-Training were offered for competition, and these were awarded to the following candidates, whose names are given in order of merit:—

#### *Scholarships.*

Mr. James W. Porter, Municipal Technical Institute and Mercantile Academy, Belfast.

Mr. John L. McIntyre, The Academy, Ballymena.

Mr. Cornelius Murphy, Christian Brothers' Schools, Cork.

Mr. John J. Murphy, Christian Brothers' Schools, Cork.

Mr. Isaac Hopper, The Academy, Cookstown.



*Teacherships-in-Training.*

- Mr. Harry E. A. Cooper, Mountjoy School, Dublin.  
 Mr. Herbert Thompson, Mountjoy School, Dublin.  
 Mr. Bartholomew P. Bowen, Christian Brothers' Schools, North Richmond Street, Dublin.  
 Mr. Thomas W. Hall, Municipal Technical School, Lurgan.  
 Mr. Robert T. J. Ennis, Clongowes Wood College.

## ART TEACHERSHIPS-IN-TRAINING.

At an examination for three Teacherships-in-Training, tenable at the Metropolitan School of Art, Dublin, held on the 27th, 28th, and 29th June, 1911, thirteen candidates presented themselves. The Teacherships were awarded to the following :—

- Miss Una E. Duncan, of Rathgar, Co. Dublin.  
 Miss Mary L. Lynch, of Sandymount, Co. Dublin.  
 Mr. John S. Keating, of Limerick.

## INDUSTRIAL SCHOLARSHIPS.

There were no new Industrial Scholarships offered for competition in 1911. The following Scholarships in Woollen Manufacture were renewed for the Session 1911-12 :—

- Mr. Francis H. Crowley, awarded in 1909 and renewed in 1910.  
 Mr. George S. Hunter, awarded in 1909 and renewed in 1910.  
 Mr. Henry K. C. Weir, awarded in 1910.

The Scholarship in Linen Manufacture, awarded to Mr. Charles H. Leland in 1910 was renewed for the Session 1911-12.

The Scholarships in Woollen Manufacture are being held at the Leeds University; the Scholarship in Linen Manufacture is being held at the Municipal School of Technology, Manchester.

## COMMERCIAL SCHOLARSHIPS.

There were no new Commercial Scholarships offered for competition in 1911.

The Scholarships awarded in 1910 to the following were renewed for the Session 1911-12, and are being held at the London School of Economics and Political Science (University of London) :—

- Mr. Patrick W. Bryan.  
 Mr. George J. T. Clappett.  
 Mr. Maurice J. Cleannon.  
 Mr. Francis McBryan.  
 Mr. Joseph A. McCullough.  
 Mr. Bernard F. Shields.

Mr. Timothy J. McCormack, who held a Scholarship from the Department during the Session 1910-11, has been engaged as temporary teacher of Commercial Subjects in the Queen's County for the Session 1911-12; and Mr. John McCuigan, who also held a Scholarship during the Session 1910-11, has obtained a similar appointment in the County Roscommon. These teachers will continue their Scholarships for a second year during the Session 1912-13.

## SCHOLARSHIPS IN CROCHET-WORK AND SPRIGGING.

Ten candidates competed for the three Scholarships offered for the purpose of training teachers of Crochet-work and Sprigging, which were awarded as follows :—

*Scholarships in Crochet-Work.*

- Miss Agnes J. O'Callaghan, of Bantry, Co. Cork.  
 Miss Annie McElroy, of Clones, Co. Monaghan.

*Scholarship in Sprigging.*

- Miss Mary Ellen Ward, of Letterbarrow, Co. Donegal.

The Scholarships are tenable for one year at the Training School for Lace and Sprigging Teachers, Enniskillen.

TABLE I.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED from the DEPARTMENT'S ENDOWMENT and from LOCAL RATES for the purpose of TECHNICAL INSTRUCTION in NON-AGRICULTURAL SUBJECTS. ACADEMIC YEAR, 1st August, 1910, to 31st July, 1911.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>LEINSTER.</b>				
COUNTY CARLOW: } Carlow Urban District,	915 12 3	620 0 0	—	295 12 3
COUNTY DUBLIN: } Blackrock Urban District,	740 0 0	430 0 0	—	310 0 0
Kingstown " "	680 0 0	500 0 0	—	180 0 0
Pembroke " "	1,350 0 0	850 0 0	200 0 0	300 0 0
Rathmines and Rathgar Urban District,	2,327 0 0	1,250 0 0	—	1,077 0 0
	2,006 0 0	1,250 0 0	—	756 0 0
DUBLIN COUNTY BOROUGH: .	12,706 18 2	(a)9,296 18 2	—	(a)3,500 0 0
COUNTY KILDARE: } Athy Urban District,	1,117 8 5	500 0 0	100 0 0	517 8 5
Nass " "				
COUNTY KILKENNY: } Kilkenny Urban District,	1,440 0 0	820 0 0	—	620 0 0
KING'S COUNTY: } Birr Urban District	919 6 8	550 0 0	—	369 6 8
Tullamore " "				
COUNTY LONGFORD: } Granard Urban District,	549 15 8	410 0 0	—	139 15 8
Longford " "				
COUNTY LOUTH: } Dundalk Urban District,	934 0 0	710 0 0	—	224 0 0
Drogheda " . .	700 0 0	600 0 0	—	100 0 0
COUNTY MEATH: } Kells Urban District,	751 0 1	500 0 0	—	251 0 1
Navan " "				
Trim " "				
QUEEN'S COUNTY: . . .	943 1 0	450 0 0	—	493 1 0
COUNTY WESTMEATH: } Athlone Urban District, .	776 0 0	450 0 0	—	326 0 0
	450 0 0	400 0 0	—	50 0 0
COUNTY WEXFORD: . . .	950 0 0	350 0 0	—	600 0 0
Enniscorthy Urban District,	284 0 0	250 0 0	—	34 0 0
New Ross " "	331 0 5	200 0 0	100 0 0	31 0 5
Wexford " "	675 14 0	600 0 0	—	75 14 0
COUNTY WICKLOW: } Wicklow Urban District,	1,176 1 0	550 0 0	300 0 0	326 1 0
Bray " " . . .	520 0 0	400 0 0	—	120 0 0
Totals for Leinster, . .	33,243 17 8	21,856 18 2	700 0 0	10,686 19 6

(a) Contributions for the financial year ended 31st March, 1911.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &amp;c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>MUNSTER.</b>				
COUNTY CLARE: } Ennis Urban District, Kilrush "	849 3 2	550 0 0	—	299 3 2
COUNTY CORK: } Cork City Urban District, Fermoy " Kinsale " Macroom " Malton " Midleton " Skibbereen " Youghal " Queenstown "	4,496 9 6	2,123 0 0	—	2,371 9 6
CORK COUNTY BOROUGH: .	3,132 0 1	(a) 2,411 8 3	—	(a) 720 11 10
COUNTY KERRY: } Killarney Urban District, Listowel " Tralee "	1,151 7 9	700 0 0	—	451 7 9
	619 10 9	525 0 0	30 0 0	64 10 9
COUNTY LIMERICK: .	645 0 0	430 0 0	—	215 0 0
LIMERICK COUNTY BOROUGH: .	1,500 6 3	(a) 1,208 11 2	—	(a) 291 15 1
COUNTY TIPPERARY (NORTH RIDING): } Newry Urban District, Templemore " Thurles "	976 16 0	660 0 0	—	316 16 0
COUNTY TIPPERARY (SOUTH RIDING): } Carrick-on-Suir Urban District, Cashel " Oxmantown "	880 19 7	480 0 0	—	400 19 7
	603 5 10	325 0 0	—	78 5 10
Tipperary Joint Urban and Rural District,	731 8 0	450 0 0	—	271 8 0
COUNTY WATERFORD: } Dungarvan Urban District,	1,074 2 8	500 0 0	—	574 2 8
WATERFORD COUNTY BOROUGH: .	1,024 19 4	(a) 847 19 11	—	(a) 176 19 5
1 Totals for Munster, .	15,142 8 11	11,737 19 4	30 0 0	6,324 9 7

(a) Contributions for the financial year ended 31st March, 1911.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &amp;c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contributions from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>ULSTER.</b>				
COUNTY ANTRIM :				
Ballyclare Urban District, }	1,095 18 1	530 0 0	—	565 18 1
Portrush " }	645 0 0	520 0 0	—	125 0 0
Ballymena " }	324 10 6	210 0 0	—	114 10 6
Ballymoney Joint Urban and Rural District, }	254 2 2	215 0 0	—	39 2 2
Carriekfergus Urban District, Larne " }	432 7 6	300 0 0	—	132 7 6
BELFAST COUNTY BOROUGH :	20,077 11 3	(a)11,051 8 4	—	(a)9,016 2 11
COUNTY ARMAUGH :				
Armagh Urban District, }	387 17 2	220 0 0	—	167 17 2
Lurgan " }	437 10 5	350 0 0	—	87 10 5
Portadown " }	108 2 2	(b)600 0 0	—	108 2 2
COUNTY CAVAN :				
Belturbet Urban District, Cavan " }	610 0 0	500 0 0	—	110 0 0
Coothill " }				
Co. DONEGAL :				
Letterkenny Urban District, }	733 18 4	416 0 0	—	317 18 4
COUNTY DOWN :				
Bankbridge Urban District, }	570 0 0	350 0 0	—	220 0 0
Bangor " }	300 0 0	250 0 0	—	50 0 0
Dromore " }	391 15 10	250 0 0	—	141 15 10
Holywood " }	120 0 0	100 0 0	—	20 0 0
Newry " }	252 5 3	200 0 0	—	52 5 3
Newtownards " }	740 0 0	600 0 0	—	140 0 0
Warrenpoint " }	505 10 5	450 0 0	—	55 10 5
COUNTY FERMANAGH :				
Enniskillen Urban District, }	103 19 6	70 0 0	—	33 19 6
COUNTY LONDONDERRY :				
Linsavady Urban District, }	899 0 0	400 0 0	—	499 0 0
Coleraine " }	861 3 5	514 0 0	—	347 3 5
LONDONDERRY COUNTY BOROUGH :				
Coleraine " }	504 0 0	400 0 0	—	104 0 0
COUNTY MONAGHAN :	1,683 14 2	(a)1,263 14 2	—	(a)420 0 0
Monaghan Urban District, }				
Castledown " }	737 4 6	425 0 0	—	312 4 6
Carrikmacross " }				
Clones " }				
COUNTY TYRONE :				
Cookstown Urban District, }				
Dungannon " }	1,423 1 4	850 0 0	—	573 1 4
Strabane " }				
Totals for Ulster, . . .	35,495 16 1	21,525 2 6	—	13,970 13 7

(a) Contributions for the financial year ended 31st March, 1911.

(b) Includes £100 contribution to separate scheme for girls.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &c.—*continued.*

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
CONNAUGHT.				
COUNTY GALWAY :				
Ballinasloe Urban District,	1,735 2 0	800 0 0	—	935 2 0
Galway "	801 0 4	680 0 0	—	121 0 4
COUNTY LEITHEN :	600 0 0	300 0 0	100 0 0	200 0 0
COUNTY MAYO :				
Ballina Urban District,	1,377 11 10	750 0 0	200 0 0	427 11 10
Castlebar "				
Westport "				
COUNTY ROSCOMMON :	750 0 0	450 0 0	—	300 0 0
"				
COUNTY SLEIGO :	470 0 0	250 0 0	—	220 0 0
Sleigo Urban District,	640 0 0	550 0 0	—	90 0 0
Totals for Connaught,	6,373 14 2	3,780 0 0	300 0 0	2,293 14 2
TOTALS FOR LEINSTER,	33,243 17 8	21,856 18 2	700 0 0	10,686 19 6
TOTALS FOR MUNSTER,	18,142 8 11	11,737 19 4	30 0 0	6,324 9 7
TOTALS FOR ULSTER,	35,495 16 1	21,525 2 6	—	13,970 13 7
TOTALS FOR CONNAUGHT,	6,373 14 2	3,780 0 0	300 0 0	2,293 14 2
TOTALS FOR IRELAND,	93,255 16 10	58,950 0 0	1,030 0 0	33,275 16 10

## TABLE

LIST OF TECHNICAL SCHOOLS AND SCIENCE AND ART SCHOOLS during the Financial Year, 1st April, 1910—31st March, 1911, 1st August, 1909—31st July, 1910.

School No.	Name of School.	Preparatory Course.		Specialised Courses.	
		No. of Students in respect of whom grants were paid.	Amount of Grant.	No. of Students in respect of whom grants were paid.	Amount of Grant.
			£ s. d.		£ s. d.
<b>LEINSTER.</b>					
6817	Co. CARLOW : Carlow : Technical School, . . . . .	—	—	3	3 6 2
6811	Co. DUBLIN : Ballsbridge : Technical School, . . . . .	6	5 6 8	55	55 11 5
6218	Blackrock : Municipal Technical School, . . . . .	22	40 3 11	67	115 12 1
6163	Kingsdown : Municipal Technical School, . . . . .	2	1 2 8	183	389 17 8
6498	Rathfriland : School of Commerce, . . . . .	—	—	124	230 14 11
6956	Rathfriland : School of Domestic Economy, . . . . .	—	—	62	55 6 4
6941	Ringsend : Parnock Technical School, . . . . .	17	16 8 4	142	300 15 9
6143	Co. DUBLIN : Christian Brothers' Novitiate, Marino, . . . . .	—	—	*69	38 13 2
6910	City of Dublin Technical Schools, . . . . .	32	27 8 3	667	1,825 6 3
6795	Co. KILDARE : Athy : Technical School, . . . . .	—	—	4	2 17 8
6442	Naas : Technical School, . . . . .	—	—	4	1 9 1
6607	Co. KILKENNY : Kilkenay : City Technical School, . . . . .	11	8 1 4	30	55 15 3
6599	Co. KILKENNY : Blarney : Technical School, . . . . .	3	4 4 4	12	9 3 9
6508	Tullamore : Technical School, . . . . .	4	2 1 2	11	12 9 3
6416	Co. LOUTH : Drogheda : Municipal Technical School, . . . . .	7	10 19 0	94	193 1 10
6415	Dundalk : Municipal Technical School, . . . . .	16	30 14 7	64	183 2 5
6924	Co. MEATH : Navan : Technical School, . . . . .	6	6 19 11	42	35 4 8
6917	Co. MEATH : Maryborough : Technical School, . . . . .	5	4 6 11	24	15 16 1
6576	Co. WESTMEATH : Athlone : Technical School, . . . . .	6	4 10 2	15	7 4 3
6806	Mullingar : Technical School, . . . . .	7	4 10 10	7	5 6 1
6620	Co. WEXFORD : Enniscorthy : Technical School, . . . . .	—	—	10	12 16 10
6790	New Ross : Municipal Technical School, . . . . .	15	12 13 5	18	14 14 0
6347	Wexford : Municipal Technical School, . . . . .	—	—	48	69 11 8
6697	Co. WICKLOW : Arklow : Technical School, . . . . .	10	13 13 5	26	57 18 19
6457	Bray : Technical School, . . . . .	22	36 5 7	28	36 13 10
6709	Wicklow : Technical School, . . . . .	6	8 0 0	15	20 9 1
<b>TOTALS FOR LEINSTER.</b>		197	237 15 6	1,824	3,484 12 9
<b>MUNSTER.</b>					
6761	Co. CORK : Ballymore : Technical School, . . . . .	—	—	9	21 2 5
6803	Bandon : Technical School, . . . . .	—	—	19	27 4 9
6785	Bantry : Technical School, . . . . .	—	—	17	7 13 10
6922	Buttevant : Technical School, . . . . .	—	—	3	1 6 4
6790	Charleville : Technical School, . . . . .	—	—	9	3 10 9
6567	Clonea : Technical School, . . . . .	10	5 16 2	18	14 6 6
6671	Doneraile : Technical School, . . . . .	—	—	11	25 13 6
6864	Dunmanway : Convent of Charity, St. Mary's, . . . . .	—	—	19	31 12 9
6751	Formoy : Technical School, . . . . .	—	—	34	49 17 5

\* Training College Classes under Section VI.

## II.

AND CLASSES, showing the Grants made by the Department in respect of Instruction given during the Academic Year,

School of Art.		Teachers' Classes		Apprentices' Classes.		Total.		School
No. of Students	Amount of Grant.	No. of Students in respect of whom grants were paid.	Amount of Grant.	No. of Students	Amount of Grant.	Total No. of Students in respect of whom grants were paid.	Total Grant.	No.
£ s. d.	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
—	—	—	—	—	—	3	3 0 2	6817
—	—	22	35 16 5	—	—	93	86 14 6	6611
—	—	—	—	—	—	89	155 16 0	6248
—	—	31	68 6 11	—	—	216	452 1 3	6163
—	—	—	—	—	—	124	230 14 11	6108
—	—	—	—	—	—	62	55 6 4	6956
—	—	—	—	—	—	159	317 4 1	6941
—	—	54	109 13 0	—	—	123	148 6 2	6143
—	—	10	28 5 0	—	—	709	1,680 19 6	6010
—	—	—	—	—	—	4	3 17 8	6795
—	—	—	—	—	—	4	1 9 1	6442
—	—	14	21 0 0	—	—	55	87 16 7	6607
—	—	—	—	—	—	15	13 8 1	6509
—	—	—	—	8	11 1 9	23	25 12 2	6508
—	—	—	—	—	—	101	204 0 10	6416
—	—	21	32 1 9	—	—	101	165 18 9	6415
—	—	—	—	—	—	48	42 4 7	6924
—	—	—	—	—	—	29	20 3 0	6917
—	—	—	—	—	—	21	11 14 10	6576
—	—	—	—	—	—	14	9 16 11	6806
—	—	—	—	—	—	10	12 16 10	6620
—	—	—	—	—	—	33	27 12 5	6790
—	—	—	—	—	—	48	69 11 8	6347
—	—	—	—	—	—	36	71 12 3	6697
—	—	—	—	—	—	50	92 19 5	6457
—	—	—	—	—	—	21	28 9 1	6702
—	—	152	285 3 1	8	11 1 9	2,181	4,013 13 1	—
—	—	—	—	—	—	9	21 2 5	6761
—	—	—	—	—	—	19	27 4 9	6603
—	—	—	—	—	—	17	7 13 10	6705
—	—	—	—	—	—	3	1 6 4	6922
—	—	—	—	—	—	9	3 10 0	6700
—	—	—	—	—	—	28	20 2 8	6667
—	—	—	—	—	—	11	25 13 6	6671
—	—	—	—	—	—	19	31 12 0	6664
—	—	—	—	12	16 19 4	46	66 16 9	6751

of the Regulations for Technical Schools, &c.

TABLE II.—LIST OF TECHNICAL SCHOOLS AND SCIENCE

School No.	Name of School.	Preparatory Course.		Specialised Courses.	
		No. of Students in respect of whom grants were paid.	Amount of Grant.	No. of Students in respect of whom grants were paid.	Amount of Grant.
			£ s. d.		£ s. d.
Co. Cork.—continued.					
6621	Kanturk : Technical School, . . . . .	—	—	4	0 14 3
6615	Kinsale : Technical School, . . . . .	—	—	13	7 5 0
6639	Macroom : Technical School, . . . . .	—	—	24	18 4 4
6684	Mallow : Technical School, . . . . .	—	—	7	3 19 7
6766	Midleton : Technical School, . . . . .	—	—	16	22 14 2
6686	Millstreet : Drishane Convent of Mercy, . . . . .	—	—	—	—
6658	Millstreet : Technical School, . . . . .	—	—	5	1 11 11
6619	Passage West : Technical School, . . . . .	—	—	3	7 1 4
6604	Queenstown : Technical School, . . . . .	—	—	62	183 2 0
6759	Ringskiddy : Technical School, . . . . .	—	—	7	17 1 6
6602	Skibbereen : Technical School, . . . . .	—	—	23	15 15 3
6434	Youghal : Presentation Convent, . . . . .	—	—	13	4 0 6
6610	Youghal : Technical School, . . . . .	—	—	29	36 12 8
Co. BOROUGH OF CORK :					
6605	Crawford Municipal Technical Institute, . . . . .	—	—	105	312 16 1
6663	Presentation Brothers' Training College, . . . . .	—	—	*42	18 19 10
6953	School of Commerce, . . . . .	70	138 2 9	172	290 17 9
Co. KERRY :					
6680	Killarney : Technical School, . . . . .	—	—	3	4 10 8
6678	Listowel : Technical School, . . . . .	—	—	4	11 9 0
6671	Trillick : Central Technical School, . . . . .	32	37 8 1	56	109 10 9
Co. BOROUGH OF LIMERICK :					
6638	Municipal Technical Institute, . . . . .	17	15 14 6	136	253 16 11
6951	School of Commerce, . . . . .	7	7 18 10	89	118 0 2
Co. TIPPERARY :					
6552	Carriek-on-Suir : Technical School, . . . . .	—	—	9	25 3 10
6582	Cashel : Technical School, . . . . .	—	—	7	9 13 6
6556	Clonmel : Technical School, . . . . .	—	—	93	220 7 2
6252	Enly : Glove-making School, . . . . .	10	11 9 6	—	—
6396	Roscrea : Technical School, . . . . .	21	36 12 2	22	101 8 2
6148	Thurles : Presentation Convent, . . . . .	—	—	31	81 0 5
6695	Tipperary : Technical School, . . . . .	15	17 8 2	34	53 0 10
Co. WATERFORD :					
6369	Dungarvan : Technical School, . . . . .	—	—	9	16 18 9
6366	Lismore : Technical School, . . . . .	—	—	5	6 9 8
6510	Tramore : Technical School, . . . . .	—	—	3	2 7 4
Co. BOROUGH OF WATERFORD :					
6477	Central Technical Institute, . . . . .	10	12 10 0	94	176 13 3
6016	De La Salle Training College, . . . . .	—	—	*201	417 11 5
TOTALS FOR MUNSTER, . . . . .		192	283 0 2	1,456	2,740 15 12
ULSTER.					
Co. ANTRIM :					
6358	Ballymena : Municipal Technical School, . . . . .	39	78 8 5	213	510 1 3
6350	Ballymoney : Technical School, . . . . .	19	41 13 1	134	322 6 7
6345	Carriekfergus : Technical School, . . . . .	24	24 14 2	89	132 15 1
6232	Larne : Technical School, . . . . .	18	32 11 9	109	219 13 11
Co. BOROUGH OF BELFAST :					
6227	Municipal Technical Institute, . . . . .	517	711 17 11	1,508	3,346 17 4
Co. ARMAUGH :					
6397	Armagh : Municipal Technical School, . . . . .	22	34 19 6	86	145 7 6
6058	Armagh : Natural History and Philosophical Society's Art Class, . . . . .	—	—	12	13 5 6
6435	Lurgan : Convent of Our Lady of Mercy, . . . . .	15	25 4 10	33	67 3 10
6367	Lurgan : Municipal Technical School, . . . . .	57	110 18 9	67	133 8 7
6574	Portadown : Municipal Technical School, . . . . .	30	32 19 6	104	149 17 10

\*Training College Classes under Section VI.



## AND ART SCHOOLS AND CLASSES.—continued.

School of Art.		Teachers' Classes		Apprentices' Classes.		Total.		School No.
No. of Students	Amount of Grant.	No. of Students in respect of whom grants were paid.	Amount of Grant.	No. of Students	Amount of Grant.	Total No. of Students in respect of whom grants were paid.	Total Grant.	
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
—	—	—	—	—	—	4	0 14 3	6621
—	—	—	—	—	—	12	7 5 0	6615
—	—	—	—	—	—	24	18 4 4	6657
—	—	—	—	—	—	7	3 10 7	6584
—	—	—	—	—	—	16	22 14 2	6766
—	—	—	—	38	110 18 2	38	110 18 2	6986
—	—	—	—	—	—	5	1 11 11	6658
—	—	—	—	—	—	3	7 1 4	6619
—	—	—	—	—	—	62	188 2 0	6604
—	—	—	—	—	—	7	17 1 6	6759
—	—	—	—	—	—	29	15 15 5	6602
—	—	—	—	—	—	13	4 0 6	6434
—	—	—	—	—	—	20	36 12 8	6610
188	1,208 10 4	—	—	—	—	293	1,521 6 5	6003
—	—	—	—	—	—	42	18 19 10	6968
—	—	—	—	—	—	242	429 0 6	6958
—	—	—	—	—	—	3	4 10 8	6580
—	—	—	—	—	—	4	11 9 0	6678
—	—	21	31 4 0	—	—	109	178 2 10	6571
96	395 8 0	52	76 0 6	16	27 0 0	317	772 19 11	6039
—	—	—	—	—	—	96	125 19 0	6981
—	—	—	—	—	—	9	25 3 10	6852
—	—	—	—	—	—	7	9 13 6	6882
—	—	—	—	—	—	103	231 18 8	6556
—	—	—	—	9	28 2 6	9	28 2 6	6252
—	—	—	—	—	—	43	138 0 4	6596
—	—	—	—	—	—	51	81 0 5	6148
—	—	—	—	—	—	19	70 9 0	6695
—	—	—	—	—	—	9	16 18 2	6808
—	—	—	—	—	—	5	6 2 8	6808
—	—	—	—	—	—	3	2 7 4	6810
39	156 17 6	22	41 7 6	19	46 5 11	184	433 14 2	6477
—	—	—	—	—	—	201	417 11 5	6016
323	1,760 15 10	95	148 12 0	94	229 5 11	2,160	5,162 9 10	—
—	—	43	117 6 0	—	—	295	705 15 8	6358
—	—	27	74 3 5	—	—	160	435 2 11	6350
—	—	—	—	—	—	113	187 9 3	6845
—	—	19	40 7 6	—	—	146	282 13 2	6239
470	2,223 4 4	188	364 6 3	10	49 5 1	2,691	6,700 10 11	6227
—	—	—	—	—	—	108	180 7 0	6307
—	—	—	—	—	—	12	13 5 6	6038
—	—	—	—	—	—	48	92 7 8	6433
—	—	—	—	—	—	124	244 5 4	6367
—	—	41	98 14 6	11	61 14 10	186	341 6 8	6574

of the Regulations for Technical Schools, &amp;c.

TABLE II.—LIST OF TECHNICAL SCHOOLS AND SCIENCE

School No.	Name of School.	Preparatory Course.			Specialised Courses.				
		No. of Students in respect of whom grants were paid.	Amount of Grant.			No. of Student in respect of whom grants were paid.	Amount of Grant.		
			£	s.	d.		£	s.	d.
Co. DOWN:									
6582	Banbridge: Technical School, . . . . .	29	37	0	10	48	95	7	6
6587	Bangor: Technical School, . . . . .	9	11	7	2	54	124	1	1
6572	Holywood: Technical School, . . . . .	12	21	11	10	40	61	1	8
6544	Newry: Municipal Technical School, . . . . .	29	38	6	9	103	224	15	6
6545	Newtownards: Municipal Technical School, . . . . .	39	50	1	1	46	58	10	11
6748	Warrenpoint: Municipal Technical School, . . . . .	9	12	7	2	15	18	11	10
Co. FERMANAGH:									
6872	Enniskillen: Technical School, . . . . .	8	5	3	1	12	5	9	4
Co. LONDONDERRY:									
6236	Coleraine: Technical School, . . . . .	13	25	0	2	107	231	2	6
6976	Lisnaveidy: Technical School, . . . . .	38	55	14	11	46	62	11	3
6963	Magherafelt: Technical School, . . . . .	16	25	9	0	58	87	5	3
Co. BOROUGH OF LONDONDERRY:									
6037	Municipal Technical School, . . . . .	46	55	0	10	155	407	3	0
Co. MONAGHAN:									
6121	Castleblayney: Technical School, . . . . .	—	—	—	—	23	27	4	2
Co. TYRONE:									
6791	Cookstown: Technical School, . . . . .	14	20	19	6	50	92	10	10
6581	Dungannon: Technical School, . . . . .	14	18	18	9	38	65	0	8
6797	Omagh: Technical School, . . . . .	17	15	18	9	40	63	12	8
6768	Strabane: Technical School, . . . . .	39	51	0	6	52	97	18	10
TOTALS FOR ULSTER, . . . . .		1,073	1,588	8	3	3,247	6,763	1	5
CONNAUGHT.									
Co. GALWAY:									
6596	Ballinasloe: Technical School, . . . . .	1	0	14	5	1	1	1	8
6066	City of Galway Technical Institute, . . . . .	14	9	7	8	23	44	0	9
Co. SLIGO:									
6765	Sligo: Municipal Technical School, . . . . .	9	10	9	8	87	162	11	8
TOTALS FOR CONNAUGHT, . . . . .		24	20	11	9	110	197	14	1
TOTALS FOR LEINSTER (26 Schools), . . . . .		197	237	15	6	1,824	3,486	12	9
TOTALS FOR MUNSTER (42 Schools), . . . . .		192	283	0	2	1,456	2,740	15	11
TOTALS FOR ULSTER (26 Schools), . . . . .		1,073	1,538	8	3	3,247	6,763	1	5
TOTALS FOR CONNAUGHT (3 Schoo		24	20	11	9	110	197	14	1
TOTALS FOR IRELAND (91 Schools), . . . . .		1,486	2,079	15	8	6,637	13,186	4	2

AND ART SCHOOLS AND CLASSES.—*continued.*

School of Art.		Teachers' Classes.		Apprentices' Classes.		Total.		School No.
No. of Students	Amount of Grant.	No. of Students in respect of whom grants were paid	Amount of Grant.	No. of Students	Amount of Grant.	Total No. of Students in respect of whom grants were paid.	Total Grant.	
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
—	—	31	77 15 3	—	—	108	210 3 7	6582
—	—	—	—	—	—	63	135 8 3	6587
—	—	—	—	—	—	52	82 13 6	6572
—	—	20	30 13 9	—	—	152	294 16 0	6544
—	—	—	—	—	—	85	163 12 0	6645
—	—	—	—	—	—	24	30 19 0	6748
—	—	—	—	9	126 2 0	29	136 14 5	6872
—	—	23	34 7 6	—	—	143	290 16 2	6235
—	—	14	24 1 3	—	—	98	142 7 5	6876
—	—	14	25 8 9	—	—	88	138 8 0	6863
138	375 10 8	33	74 18 9	—	—	372	912 13 3	6087
—	—	—	—	—	—	23	27 4 2	6121
—	—	—	—	—	—	64	113 10 4	6701
—	—	—	—	—	—	52	86 19 5	6581
—	—	—	—	—	—	57	81 11 5	6707
—	—	—	—	—	—	98	148 19 4	6708
606	2,603 15 0	453	960 2 9	30	237 1 11	5,411	12,102 9 4	—
—	—	—	—	—	—	9	1 16 1	6596
—	—	—	—	—	—	36	53 8 5	6066
—	—	18	24 18 9	—	—	114	188 0 1	6765
—	—	18	24 18 9	—	—	152	243 4 7	—
—	—	152	235 3 1	8	11 1 9	2,181	4,018 13 1	—
323	1,760 15 10	95	148 12 0	94	229 5 11	2,160	5,162 9 10	—
606	2,603 15 0	453	960 2 9	30	237 1 11	5,411	12,102 9 4	—
—	—	18	24 18 9	—	—	152	243 4 7	—
931	4,384 10 10	718	1,418 16 7	132	477 9 7	9,904	21,526 16 10	—

LIST OF DAY SECONDARY SCHOOLS, showing the GRANTS paid by the Department  
Instruction in the Subjects of the Department's Programme given

No. of School	Name of School	EXPERIMENTAL SCIENCE				Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	LEINSTER.					£ s. d.					£ s. d.
6247	Co. CARLOW: Bagenalstown: Presentation Convent	16	8	5	3	60 7 7	16	8	5	5	20 12 5
6188	Bagenalstown: St. Joseph's Classical School	5	11	4	—	39 0 7	5	11	—	—	5 4 10
6170	Carlow: Christian Brothers' Schools	20	9	6	—	39 18 7	20	9	—	—	7 13 8
6260	Carlow: Convent of Mercy	8	4	9	2	51 14 1	8	4	7	2	16 12 4
6182	Knockbeg: St. Mary's College	18	18	15	—	83 8 3	18	18	—	—	12 5 6
6524	Rathvilly: D'Israeli School	4	2	—	—	6 1 0	4	2	—	—	5 0 10
6356	Tullow: Bridgine Convent	9	7	9	4	50 11 1	9	7	5	—	9 14 9
6107	Tullow: St. Patrick's Seminary	8	12	—	—	25 4 3	8	12	—	—	8 11 11
6224	Co. DUBLIN: Balbriggan: Loreto Convent	40	18	10	2	100 1 11	40	18	—	—	20 14 9
6174	Ballsbridge: Masonic Girls' School	9	14	5	—	45 8 8	9	14	—	—	5 11 0
6093	Blackrock College	45	41	49	17	278 6 9	45	41	—	—	25 0 3
6249	Blackrock: Dominican Convent, Bon Hill	13	13	—	—	29 10 11	13	13	10	—	14 0 2
6583	Blackrock: Day Trades Preparatory School	9	14	4	—	67 8 1	9	14	4	—	23 8 8
6097	Cabra: St. Mary's Dominican Convent	44	—	—	—	51 10 8	44	—	—	—	14 12 9
6187	Castleknock: Mercer's School	6	5	—	—	13 6 6	6	5	5	—	5 19 3
6357	Castleknock: Morgan's Endowed School	9	9	—	—	39 13 1	9	9	2	3	14 18 5
6299	Castleknock: St. Vincent's College	56	57	35	10	272 8 11	56	57	—	—	33 1 10
6262	Chapelizod: Mount Sackville Convent	11	9	7	—	44 3 8	11	9	—	—	7 0 3
6122	Clonsilla: St. Joseph's Seminary	16	9	—	—	31 9 5	16	9	2	—	18 4 11
6281	Clonsilla: Masonic Boys' School	22	14	16	4	106 18 8	22	14	—	—	8 14 8
6198	Dalkey: Loreto Abbey	11	11	—	1	32 5 5	11	11	—	—	8 11 7
6096	Donnybrook: St. Mary's University College	18	6	4	—	32 0 5	18	6	—	—	5 1 9
6150	Kingsdown: Christian Brothers' Schools	31	18	3	—	61 0 5	21	18	—	—	11 9 0
6359	Kingsdown: Cruthwaite School	12	1	—	—	14 7 6	12	1	—	—	5 6 8
6638	Kingsdown: Presentation Brothers' College	5	3	2	—	12 11 6	5	3	—	—	2 7 4
6546	Kingsdown: Victoria School	2	2	1	—	6 5 7	2	2	—	—	1 4 0
6096	Rathfarnham: Loreto Abbey	19	20	11	—	66 6 5	19	20	—	—	13 12 3
6791	Rathfarnham: St. Columba's College	2	6	1	2	15 11 11	2	6	—	—	2 6 6
6261	Rathgar: Norfolk College	5	9	—	—	12 1 8	5	2	1	—	3 19 7

during the Financial Year, 1st April, 1910—31st March, 1911, in respect of  
during the Academic Year, 1st August, 1909—31st July, 1910.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of School		
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant					Amount of Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year				4th Year
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	18	6	5	2	22 4 7	103 4 7	8247
5	11	—	—	5 15 3	—	—	—	—	—	50 0 8	6188
13	—	—	—	4 15 11	—	—	—	—	—	52 8 2	6170
—	—	—	—	—	8	—	7	2	16 6 11	54 13 4	6260
8	6	—	—	3 8 1	—	—	—	—	—	99 1 10	6132
—	—	—	—	—	—	—	—	—	—	8 1 10	6524
—	—	—	—	—	—	—	9	4	11 4 7	71 10 5	6356
8	12	—	—	8 0 4	—	—	—	—	—	41 18 8	6107
—	—	—	—	—	—	—	9	4	18 9 8	137 6 2	6224
—	—	—	—	—	—	—	—	—	—	50 19 8	6174
—	—	—	—	—	—	—	—	—	—	303 7 5	6093
—	—	—	—	—	—	—	3	8	8 9 2	52 0 3	6240
8	14	3	—	35 7 8	—	—	—	—	—	125 19 3	6503
—	—	—	—	—	—	—	—	—	—	62 3 5	6007
—	—	—	—	—	—	—	—	—	—	19 5 9	6187
—	—	—	—	—	—	—	—	—	—	47 8 6	6267
—	—	—	—	—	—	—	—	—	—	303 10 9	6209
—	—	—	—	—	—	—	—	—	—	51 9 11	6262
—	—	—	—	—	—	—	—	—	—	49 14 4	6122
—	—	—	—	—	—	—	—	—	—	114 13 4	6281
—	—	—	—	—	5	—	2	6	14 2 5	54 19 5	6195
—	—	—	—	—	—	—	—	—	—	37 2 2	6095
—	—	—	—	—	—	—	—	—	—	72 9 5	6150
—	—	—	—	—	19	1	—	—	7 14 1	27 8 3	6059
—	—	—	—	—	—	—	—	—	—	14 18 10	6635
—	—	—	—	—	1	3	—	—	2 0 10	9 10 5	6546
—	—	—	—	—	—	—	5	—	5 18 5	85 17 1	6096
—	—	—	—	—	—	—	—	—	—	17 18 5	6791
—	—	—	—	—	—	—	—	—	—	16 1 3	6261

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. DUBLIN—(continued.)					£ s. d.					£ s. d.
6905	Rathmines College	15	18	6	—	61 0 7	15	18	—	—	5 17 5
6929	Rathmunn Loretto Convent	19	6	—	—	18 14 8	19	6	4	2	12 19 2
6974	Rathmines: Egoli Estate (St. Enda's School)	20	8	—	1	39 4 4	20	8	—	1	10 9 6
6261	Rathmines: St. Mary's College	14	22	5	3	50 4 8	14	22	—	—	8 14 7
6802	Ringsend: Pembroke Day Trades Preparatory School	32	17	11	—	160 16 6	32	17	11	—	66 7 9
	Co. BOROUGH OF DUBLIN:										
6159	Alexandra College	—	4	14	5	87 9 9	—	4	—	1	1 7 10
6264	Alexandra School	41	31	—	—	91 7 8	41	31	—	—	27 19 9
6142	Belvedere College	16	22	—	2	57 10 6	16	22	—	—	9 10 5
6996	Bertrand Intermediate School for Girls	32	12	—	—	39 14 8	32	12	4	—	18 9 5
6371	Catholic University School	11	10	5	—	29 0 11	11	10	—	—	4 3 9
6162	Christian Brothers' Schools, James's Street	49	38	17	7	155 5 8	49	38	17	7	41 6 10
6219	Christian Brothers' Schools, Marjorie	27	22	—	—	55 17 11	27	22	—	—	16 5 6
6139	Christian Brothers' Schools, Nth. Brunswick St.	38	14	—	—	69 15 7	38	14	—	—	16 5 10
6156	Christian Brothers' Schools, Nth. Richmond St.	174	105	63	39	521 7 2	174	105	—	—	68 15 7
6117	Christian Brothers' Schools, Synge Street	37	69	11	19	267 2 5	37	69	—	—	49 6 1
6344	Christian Brothers' Schools, Westland Row	43	25	16	—	117 9 5	43	25	—	—	22 15 10
6647	Church Home School, Clyde Road	6	5	4	—	28 9 6	6	5	—	—	3 18 3
6091	Diocesan Inter. and Commercial Sch. for Girls	36	21	—	—	64 9 9	36	21	—	—	14 5 10
6163	Diocesan School for Boys	19	21	6	3	89 0 10	19	21	—	—	11 1 3
6082	Dominican College, Eccles Street	72	62	24	7	194 13 8	72	62	—	—	37 12 3
6094	Kinn's Hospital	23	38	21	6	167 6 5	23	33	—	—	15 2 6
6065	Loretto College, St. Stephen's Green	29	29	6	—	81 18 7	29	29	—	—	20 7 0
6021	Loretto Convent, North Great George's St.	19	11	4	—	51 11 2	19	11	—	—	9 3 10
6168	Mounsey School	39	37	40	22	274 19 2	39	37	—	—	22 0 6
6054	Rutland High School	15	13	4	—	41 2 11	15	13	3	—	13 17 9
6243	St. Andrew's College	36	44	27	9	234 4 4	36	44	—	—	27 13 5
6132	St. Margaret's Hall, Meaph. Road	4	9	2	3	25 19 9	4	9	—	—	4 5 1
6116	St. Vincent's Orphanage	29	28	20	—	151 17 3	29	28	—	—	26 7 8
6127	The High School	43	18	12	3	129 5 2	43	18	8	2	28 13 10
6146	Wesley College	21	16	10	—	65 3 11	21	16	4	—	12 16 3
	Co. KILDARE:										
6217	Athy: Christian Brothers' Schools	21	11	7	—	60 3 9	21	11	7	—	11 19 0
6285	Celtbridge: Girls' School	28	29	—	—	74 6 9	28	29	7	—	20 15 1
6325	Monasterevan: Christian Brothers' Schools	9	8	—	—	18 4 5	9	8	—	—	3 18 4
6221	Nassau: Christian Brothers' Schools	17	19	—	—	31 7 6	17	19	—	—	6 19 10
6164	Newbridge: Dominican College	11	11	—	—	28 18 6	11	11	—	—	3 12 7
6139	Sallins: Clongowes Wood College	37	57	21	5	232 17 11	37	57	8	—	29 17 6

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of Schools
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	66 18 0	6905
—	—	—	—	—	—	—	—	—	—	31 13 10	6020
—	—	—	—	—	—	—	—	—	—	49 13 10	6974
—	—	—	—	—	—	—	—	—	—	88 19 3	6251
32	17	11	—	52 19 19	—	—	—	—	—	220 4 1	6862
—	—	—	—	—	—	—	—	—	—	38 17 7	6159
—	—	—	—	—	—	—	—	—	—	119 7 5	6264
—	—	—	—	—	—	—	—	—	—	67 9 11	6142
—	—	—	—	—	25	10	1	6	22 9 4	100 13 5	6906
—	—	—	—	—	—	—	—	—	—	33 3 11	6271
—	—	—	—	—	—	—	—	—	—	196 12 6	6162
27	22	—	—	15 18 1	—	—	—	—	—	88 1 6	6219
33	14	—	—	15 9 9	—	—	—	—	—	101 11 2	6130
190	38	—	—	58 9 6	—	—	—	—	—	648 12 3	6156
42	—	—	—	13 14 10	—	—	—	—	—	330 10 4	6117
—	—	—	—	—	—	—	—	—	—	140 5 3	6244
—	—	—	—	—	—	—	—	—	—	32 7 9	6647
—	—	—	—	—	—	—	13	1	15 9 11	93 15 9	6091
—	—	—	—	—	—	—	—	—	—	100 2 1	6152
—	—	—	—	—	—	—	21	11	31 2 4	263 8 3	6082
—	—	—	—	—	—	—	—	—	—	182 8 11	6004
—	—	—	—	—	—	—	20	4	36 17 0	139 2 7	6065
—	—	—	—	—	—	—	4	—	4 13 2	65 8 2	6021
—	—	—	—	—	—	—	—	—	—	296 10 8	6168
—	—	—	—	—	—	—	—	—	—	55 0 8	6054
—	—	—	—	—	—	—	—	—	—	261 17 9	6243
—	—	—	—	—	—	—	—	—	—	30 2 1	6139
24	18	19	—	37 17 0	—	—	—	—	—	210 1 11	6115
—	—	—	—	—	—	—	—	—	—	157 19 0	6127
3	—	—	—	1 3 2	—	—	—	—	—	85 3 4	6146
14	—	—	—	4 3 7	—	—	—	—	—	76 6 4	6217
—	—	—	—	—	14	14	4	6	23 13 1	128 14 11	6285
9	8	—	—	5 9 11	—	—	—	—	—	27 12 6	6323
17	10	—	—	8 18 9	—	—	—	—	—	46 16 7	6221
—	—	—	—	—	—	—	—	—	—	32 11 1	6164
62	—	—	—	24 0 2	—	—	—	—	—	276 15 7	6139

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					DRAWING				
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
						£ s. d.					£ s. d.
6304	Co. KILKENNY: Callan: Christian Brothers' Schools	9	16	—	—	32 9 9	9	16	—	—	7 15 5
6458	Gurobridge: Bridgeline Convent	9	5	3	—	20 4 5	9	5	—	—	5 19 0
6059	Kilkenny: Christian Brothers' Schools	34	18	6	—	65 9 9	34	18	—	—	17 14 11
6487	Kilkenny College	16	13	13	—	81 18 0	16	13	12	—	19 16 2
6268	Kilkenny: Loreto Convent	15	11	—	—	34 16 3	15	11	3	—	12 2 3
6135	Kilkenny: St. Kieran's College	20	25	18	4	194 17 8	20	25	—	—	16 8 8
6760	Kilkenny: Day Trades Preparatory School	10	11	0	—	86 10 2	10	11	6	—	26 2 4
6203	KING'S COUNTY: Birr: Presentation Brothers' Seminary	11	8	11	—	54 7 5	11	8	—	—	7 11 2
6362	Pertarlington: Christian Brothers' Schools	13	9	7	4	39 9 6	13	9	—	—	5 15 10
6849	(Romeau): Mount St. Joseph's Abbey	33	41	22	8	224 0 9	33	41	—	—	17 17 8
6228	Co. LONGFORD: Longford: St. M's College	13	22	11	4	86 2 1	13	22	—	—	11 14 10
6103	Co. LOUTH: Drogheda: Christian Brothers' Schools	40	18	6	—	74 1 5	40	18	—	—	12 12 11
6098	Drogheda: Grammar School	10	9	3	—	32 1 1	10	9	—	—	3 19 1
6173	Dundalk: Christian Brothers' Schools	27	19	14	—	77 12 8	27	19	—	—	12 17 5
6350	Dundalk: Convent of Mercy	14	7	—	—	27 4 6	14	7	—	—	5 17 11
6089	Dundalk: Educational Institution	15	17	9	1	98 11 8	15	17	—	—	9 19 7
6636	Dundalk: Ladies' School	4	3	2	4	34 4 2	4	3	—	—	2 12 11
6116	Dundalk: St. Mary's College	20	17	12	7	81 18 2	20	17	—	—	12 6 7
6108	Co. MEATH: Kells: Christian Brothers' Schools	38	18	13	—	103 10 9	38	18	—	—	13 19 0
6363	Navan: Loreto Abbey	20	14	—	—	36 15 5	20	14	—	—	13 16 1
6810	QUEEN'S COUNTY: Abbeyleix: Bridgeline Convent	8	11	10	—	45 7 3	8	11	—	—	6 7 2
6029	Abbeyleix: Preston School	6	5	5	—	17 0 9	6	5	—	—	4 3 9
6750	Castletown: De La Salle School	27	15	9	—	89 13 10	27	15	—	—	17 1 7
6176	Maryborough: Christian Brothers' Schools	17	12	6	—	51 1 1	17	12	—	—	8 3 6
6106	Montrath: Monastery School	3	5	0	—	32 15 7	3	5	2	—	5 17 0
6359	Montrath: St. Brigid's Convent	25	8	4	—	65 14 11	25	8	—	—	13 4 6
6911	Co. WICK: Athlone: Ranselagh School	18	13	15	—	80 13 4	18	13	—	—	12 13 2
6215	Athlone: St. Mary's School	15	7	9	—	40 14 6	15	7	—	—	6 12 10
6901	Mullingar: Christian Brothers' Schools	16	14	—	—	35 15 2	16	14	3	—	10 4 3
6536	Mullingar: Loreto Convent	17	8	—	—	26 5 3	17	8	—	—	11 2 3
6461	Mullingar: St. Finian's College	41	22	17	11	133 7 7	41	22	—	—	15 8 7



## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Amount of Grant	Total Amount of Grants	No. of School	
No. of Students recognised for Grant				No. of Students recognised for Grant							
1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year				
				£ s. d.					£ s. d.	£ s. d.	
9	16	—	—	10 4 1	—	—	—	—	—	50 12 3	6304
—	—	—	—	—	9	5	2	—	18 18 0	54 1 5	6458
—	—	—	—	—	—	—	—	—	—	88 4 8	6059
—	—	—	—	—	—	—	—	—	—	101 14 2	6487
—	—	—	—	—	8	8	5	—	16 8 2	63 6 8	6288
—	—	—	—	—	—	—	—	—	—	121 6 2	6135
10	11	6	—	40 6 9	—	—	—	—	—	152 19 3	6780
—	—	—	—	—	—	—	—	—	—	61 18 7	6205
13	8	—	—	5 6 2	—	—	—	—	—	50 11 6	6362
6	5	—	—	4 5 0	—	—	—	—	—	266 3 5	6849
2	4	1	—	3 7 8	—	—	—	—	—	101 4 7	6228
31	—	—	—	4 2 4	—	—	—	—	—	90 16 8	6103
—	—	—	—	—	—	—	—	—	—	36 0 2	6098
27	—	—	—	6 9 7	—	—	—	—	—	96 19 8	6173
—	—	—	—	—	—	—	3	3	7 13 2	40 15 7	6350
—	—	—	—	—	—	—	—	—	—	108 11 3	6089
—	—	—	—	—	—	—	—	—	—	36 17 1	6056
—	—	—	—	—	—	—	—	—	—	97 4 9	6116
22	17	—	—	17 6 9	—	—	—	—	—	134 16 6	6108
—	—	—	—	—	—	—	7	5	15 0 11	63 12 5	6563
—	—	—	—	—	7	12	7	3	36 9 9	90 4 2	6310
—	—	—	—	—	—	—	—	—	—	21 4 6	6029
—	—	—	—	—	—	—	—	—	—	106 15 5	6750
16	12	1	—	12 3 2	—	—	—	—	—	71 7 9	6176
3	3	2	—	6 5 1	—	—	—	—	—	44 17 3	6106
—	—	—	—	—	23	—	4	—	22 10 0	101 9 5	6359
18	13	15	—	16 7 7	—	—	—	—	—	111 19 1	6011
—	—	—	—	—	—	—	—	—	—	47 7 4	6215
—	—	—	—	—	—	—	—	—	—	45 19 5	6061
—	—	—	—	—	9	3	3	6	10 2 6	58 10 0	6536
—	—	—	—	—	—	—	—	—	—	148 16 2	6561

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					DRAWING				
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
						£ s. d.					£ s. d.
6104	Co. Wickford: Ennisorthy: Christian Brothers' Schools	15	20	10	—	65 12 7	15	20	—	—	10 3 6
6249	Ennisorthy: Loreto Convent	10	5	—	—	24 8 2	10	5	7	4	19 2 7
6065	Geery: Loreto Abbey	12	13	—	—	34 5 7	12	13	—	—	0 6 2
6161	New Ross: Christian Brothers Schools	13	14	3	—	55 7 0	13	14	—	—	9 1 7
6040	New Ross: Good Counsel College	10	9	7	—	35 13 11	10	9	—	—	4 17 5
6064	New Ross: John Ivory School	2	2	2	—	6 14 7	2	2	—	—	0 16 9
6733	Newtownbarry: St. Mary's Convent	25	15	8	2	124 8 6	25	15	—	—	17 8 10
6341	Wexford: Christian Brothers' Schools, Joseph St.	34	20	10	—	72 12 3	34	20	—	—	15 6 10
6066	Wexford: Loreto Convent	25	15	7	1	62 7 7	25	15	—	—	14 9 3
6270	Wexford: St. Peter's College	9	6	—	—	21 13 10	9	6	—	—	4 15 11
6530	Wexford: The Tate School	15	5	4	2	39 17 5	15	5	—	—	7 3 7
6022	Co. Wicklow: Bray: Loreto Convent	9	11	12	—	61 8 8	9	11	—	—	7 19 7
TOTALS FOR LINCEN		2,339	1,782	860	218	8,172 12 1	2,339	1,782	147	37	1,506 2 10
MUNSTER.											
6137	Co. CLARE: Ennis: Christian Brothers' Schools	35	20	16	—	97 10 3	35	20	—	—	16 3 1
6331	Ennis: St. Flannan's College	13	17	19	—	73 17 11	13	17	—	—	8 15 2
6063	Ennis: St. Mary's School, Convent of Mercy	19	14	—	—	43 4 11	19	14	—	—	13 10 6
6253	Ennistymon: Christian Brothers' Schools	14	13	8	4	50 18 9	14	13	—	—	7 17 1
6295	Kilrush: Christian Brothers' Schools	17	14	9	—	60 17 4	17	14	—	—	8 17 5
6012	Co. COCK: Blackrock: Ursuline Convent	11	12	—	—	34 6 4	11	12	3	—	13 4 6
6675	Buttevant: St. Mary's Convent of Mercy	6	8	4	—	38 16 0	6	8	4	—	9 19 0
6286	Charleville: Christian Brothers' Schools	19	13	—	—	32 0 0	19	13	—	—	5 3 4
6145	Charleville: St. Joseph's Convent of Mercy	13	11	11	7	98 14 9	13	11	11	6	27 3 2
6240	Doneraile: Christian Brothers' Schools	8	3	3	—	13 14 4	8	3	—	—	2 11 5
6157	Fermoy Christian Brothers' Schools	25	23	12	5	91 4 1	25	23	—	—	12 0 11
6308	Fermoy: Loreto Convent	26	11	—	—	44 13 9	26	11	12	2	18 9 0
6191	Fermoy: St. Colman's College	32	47	40	21	294 3 0	32	47	—	—	27 7 6
6569	Macroom: Convent of Mercy	10	9	—	—	29 13 7	10	9	—	—	6 11 8
6595	Malow: Patricia's Academy	6	5	—	—	17 9 1	6	5	—	—	2 9 9
6151	Middleton: Christian Brothers' Schools	32	20	17	9	125 13 1	32	20	—	—	16 3 7
6740	Middleton College	10	7	—	2	27 19 10	10	7	—	—	4 13 0
6110	Mitchelstown: Christian Brothers' Schools	20	20	—	—	61 16 6	20	20	7	—	21 17 2
6535	Queensdown: Convent of Mercy	15	8	—	—	44 6 3	15	8	1	—	12 8 5
6081	Queensdown: Presentation Brothers' College	18	4	3	—	42 18 1	18	4	—	—	5 14 2

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
£ s. d.					£ s. d.					£ s. d.	
15	7	—	—	7 0 7	—	—	—	—	—	82 16 8	6104
—	—	—	—	—	—	—	7	4	13 4 0	56 14 9	6249
—	—	—	—	—	—	—	7	7	20 13 7	64 5 4	6085
25	—	—	—	6 19 10	—	—	—	—	—	71 8 5	6161
—	—	—	—	—	—	—	—	—	—	49 11 4	6040
—	—	—	—	—	—	—	—	—	—	7 11 4	6064
—	—	—	—	—	25	14	8	1	27 17 7	169 14 11	6733
33	14	—	—	15 9 4	—	—	—	—	—	109 8 5	6341
—	—	—	—	—	—	—	7	—	8 13 5	85 10 3	6096
9	6	—	—	5 6 0	—	—	—	—	—	31 15 9	6570
—	—	—	—	—	—	—	—	—	—	47 1 0	6330
—	—	—	—	—	—	—	8	—	3 19 6	78 7 9	6032
674	290	63	—	458 11 7	162	76	171	81	454 5 11	10,503 13 1	—
—	—	—	—	—	—	—	—	—	—	113 13 4	6137
—	—	—	—	—	—	—	—	—	—	82 13 1	6331
—	—	—	—	—	—	—	5	—	7 14 10	64 10 3	6083
14	12	—	—	8 14 6	—	—	—	—	—	67 10 4	6282
12	—	—	—	3 12 1	—	—	—	—	—	72 6 10	6295
—	—	—	—	—	12	4	7	3	22 2 5	59 12 3	6012
—	—	—	—	—	6	5	4	—	13 11 4	47 6 4	6675
13	13	—	—	8 15 0	—	—	—	—	—	45 18 4	6286
—	—	—	—	—	18	11	11	7	52 14 9	178 12 8	6145
3	—	—	—	2 2 2	—	—	—	—	—	18 7 11	6246
22	18	—	—	12 7 1	—	—	—	—	—	115 12 1	6157
—	—	—	—	—	20	11	3	8	39 9 10	102 12 7	6398
—	—	—	—	—	—	—	—	—	—	351 15 6	6191
—	—	—	—	—	—	—	9	3	13 14 8	54 19 11	6560
6	5	—	—	3 10 1	—	—	—	—	—	23 8 11	6595
29	18	—	—	18 12 8	—	—	—	—	—	160 9 4	6131
—	—	—	—	—	—	—	—	—	—	52 13 4	6740
15	19	—	—	7 12 9	—	—	—	—	—	91 6 5	6110
—	—	—	—	—	—	—	—	1	1 11 0	58 4 8	6555
18	3	3	—	6 5 0	—	—	—	—	—	54 17 3	6081

TABLE III. - LIST OF D.

No. of School	Name of School	EXPERIMENTAL SCIENCE				Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
						£ s. d.					£ s. d.
6801	Co. CORK (continued). Queenstown Day Trades Preparatory School	14	11	—	—	70 16 2	14	11	—	—	15 8 6
6742	Shibbereen : Intermediate and Univ. School	12	3	—	—	18 10 3	12	3	—	—	2 9 3
6323	Youghal : Christian Brothers' Schools	19	15	18	15	128 14 6	19	15	—	—	9 9 2
6017	Co. BOROUGH OF CORK : Christian Brothers' College	33	48	20	20	103 9 9	32	48	—	—	20 17 11
6013	Christian Brothers' Schools, Our Lady's Mount	119	75	97	24	406 0 11	119	75	—	—	44 13 4
6354	Christian Brothers' Schools, Sullivan's Quay	36	19	—	—	62 15 6	36	19	—	—	12 3 9
6044	Grammar School	26	14	7	5	94 16 3	26	14	—	—	16 8 7
6031	High School	20	6	3	2	36 9 11	20	6	—	—	9 12 2
6056	Presentation Brothers' College	29	24	5	—	103 5 6	29	24	—	—	13 0 4
6077	Rehoboth Seminary	23	20	11	1	84 2 4	23	20	—	—	19 5 3
6057	St. Aloysius' School, St. Marie's of the Isle	21	23	—	—	79 7 4	21	23	8	4	21 18 4
6024	St. Vincent's Convent School	33	22	—	—	71 11 10	33	22	9	2	26 16 4
6123	Ursuline High School, St. Angela's	29	21	—	—	59 10 11	29	21	19	2	30 19 3
6154	Co. KERRY : Dingle : Christian Brothers' Schools	20	19	19	—	113 9 2	20	19	—	—	11 13 10
6043	Killarney : Looe's Convent	31	11	4	—	52 13 11	31	11	—	—	18 0 12
6241	Killarney : St. Brendan's Seminary	20	19	15	—	71 13 1	20	19	—	—	8 2 10
6317	Lisowal : St. Michael's College	29	17	5	—	71 0 11	29	17	—	—	13 0 1
6179	Trillick : Christian Brothers' Schools	33	19	18	—	99 13 0	33	19	—	—	13 14 1
6123	Trillick : Jeffers' Institute	18	17	12	6	96 4 3	18	17	—	—	9 12 1
6058	Trillick : Presentation Convent	13	8	—	—	30 19 2	13	8	4	—	14 4 6
6893	Co. LIMERICK : Bruff : St. Mary's Convent	43	22	—	—	72 3 6	43	22	13	—	30 9 11
6237	Killarney : St. Andrew's Secondary School	7	4	4	—	19 3 4	7	4	—	—	2 2 1
6160	Co. BOROUGH OF LIMERICK : Christian Brothers' Schools (Section I.)	68	45	30	—	103 5 0	68	45	—	—	28 0 11
6855	Christian Brothers' Schools (Section II.)	16	20	—	—	36 12 8	16	20	—	—	10 8 11
6223	Crescent College	18	12	15	—	64 12 6	18	12	—	—	4 2 1
6048	High School, Richmond House	2	—	2	—	5 7 6	2	—	1	—	1 3 2
6650	Intermediate School, Rutland Street	2	2	2	1	10 6 6	2	2	—	—	0 15 2
6172	Laurel Hill Convent	25	30	—	—	62 2 6	25	30	—	—	21 0 8
6207	Mount St. Alphonsus' School	1	2	2	6	24 0 9	1	2	—	—	1 2 4
6207	Mungret College	17	16	12	—	52 11 1	17	16	—	—	5 4 1
6151	St. Munchin's College	21	21	10	4	70 11 5	21	21	—	—	12 3 1
6044	Villiers' Endowed Boys' School	7	7	2	1	21 0 4	7	7	—	—	2 14 1
6037	Villiers' Endowed Girls' School	2	4	1	—	8 3 0	2	4	—	—	1 1 1

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
11	10	1	—	23 14 4	—	—	—	—	—	100 13 10	6801
12	3	—	—	4 3 3	—	—	—	—	—	25 3 3	6742
12	14	—	—	9 15 1	—	—	—	—	—	147 19 0	6328
20	12	—	—	5 13 3	—	—	—	—	—	223 0 11	6017
15	33	10	12	23 9 11	—	—	—	—	—	474 9 2	6013
30	—	—	—	8 5 0	—	—	—	—	—	83 4 3	6854
—	—	—	—	—	—	—	—	—	—	111 4 10	6044
—	—	—	—	—	—	—	—	—	—	46 2 1	6081
—	—	—	—	—	—	—	—	—	—	116 3 10	6056
—	—	—	—	—	3	2	1	—	4 7 9	107 15 4	6077
—	—	—	—	—	4	3	8	2	13 17 6	125 3 2	6057
—	—	—	—	—	—	—	—	—	—	98 8 2	6024
—	—	—	—	—	—	—	—	—	—	90 10 4	6133
—	—	—	—	—	—	—	—	—	—	125 8 1	6154
—	—	—	—	—	8	2	2	—	8 2 5	78 17 3	6043
—	—	—	—	—	—	—	—	—	—	80 0 11	6241
—	—	—	—	—	—	—	—	—	—	84 1 1	6317
—	—	—	—	—	—	—	—	—	—	113 7 4	6179
—	—	—	—	—	—	—	—	—	—	105 16 8	6123
—	—	—	—	—	—	—	—	—	—	45 3 2	6068
—	—	—	—	—	63	—	14	—	46 13 9	149 7 2	6898
—	—	—	—	—	—	—	—	—	—	21 5 5	6237
1	—	—	—	0 6 9	—	—	—	—	—	221 12 8	6160
23	13	—	—	22 3 3	—	—	—	—	—	59 9 10	6335
6	—	—	—	0 13 3	—	—	—	—	—	69 12 10	6523
—	—	—	—	—	—	—	—	—	—	6 10 9	6643
—	—	—	—	—	—	—	—	—	—	11 1 9	6650
—	—	—	—	—	12	—	15	—	31 16 7	114 19 10	6172
—	—	—	—	—	—	—	—	—	—	25 3 3	6267
—	—	—	—	—	—	—	—	—	—	57 15 5	6207
6	—	—	—	1 8 10	—	—	—	—	—	84 3 4	6151
—	—	—	—	—	—	—	—	—	—	25 14 9	6644
—	—	—	—	—	—	—	—	—	—	9 4 7	6637

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					DRAWING				
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	CO. TIPPERARY :					£ s. d.					£ s. d.
6101	Carrick-on-Sule: Christian Brothers' Schools	18	15	12	—	48 4 2	18	15	—	—	8 5 2
6161	Cashel: Christian Brothers' Schools	12	9	—	—	20 8 10	12	9	—	—	5 5 4
6147	Cashel: Presentation Convent	7	9	—	—	27 9 7	7	9	—	—	7 11 7
6203	Cashel: Rockwell College	64	36	14	5	177 8 11	64	36	—	—	23 0 3
6294	Clonmel: Christian Brothers' Schools, St. Mary's	10	11	2	—	24 2 8	10	11	—	—	7 6 3
6134	Clonmel: Christian Bros.' Schools, SS. Peter & Paul	24	13	9	—	47 2 6	24	13	—	—	3 12 1
6079	Clonmel: Grammar School	10	7	3	—	37 19 1	10	7	—	—	6 15 2
6030	Clonmel: Day Trades Preparatory School	12	—	—	—	32 4 4	12	—	—	—	7 5 2
6229	Knockagh: Christian Brothers' Schools	23	11	7	—	47 13 6	23	11	—	—	7 18 11
6166	Thurles: Christian Brothers' Schools	23	18	20	—	86 11 8	23	18	—	—	12 10 9
6148	Thurles: Presentation Convent	22	7	—	—	38 15 6	22	7	—	—	19 0 4
6069	Thurles: Ursuline Convent	33	26	10	3	97 14 7	33	26	—	—	23 6 8
6183	Tipperary: Christian Brothers' Schools	25	20	15	10	91 7 1	25	20	—	—	13 8 3
6301	Tipperary: Convent of Mercy	8	5	—	—	17 8 5	8	5	—	—	4 7 1
6099	Tipperary: Grammar School	8	2	4	—	16 5 9	8	2	—	—	2 7 4
	CO. WATERFORD :										
6803	Cappoquin: Mount Melkeny Seminary	23	21	14	11	100 0 3	23	21	—	—	10 12 11
6214	Dungarvan: Christian Brothers' Schools	21	16	2	—	41 16 3	21	16	—	—	8 12 9
6649	Dungarvan: St. Augustine's Seminary	11	5	9	—	43 0 6	11	5	—	—	3 3 7
6204	Lismore: Christian Brothers' Schools	19	6	5	—	42 17 8	19	6	—	—	6 16 9
6291	Trotternore: Christian Brothers' Schools	13	9	—	—	23 5 4	13	9	—	—	5 19 2
	CO. BOROUGH OF WATERFORD:										
6631	Bishop Foy High School for Boys	15	9	6	4	54 16 6	15	9	—	—	4 11 20
6912	Municipal Day Trades Preparatory School	10	10	—	—	55 3 9	10	10	—	—	10 6 2
6118	Christian Brothers' Schools, Mount Sion	43	22	13	7	102 7 11	43	22	—	—	13 15 6
6165	Christian Brothers' College, Waterpark	19	18	12	—	64 18 11	19	18	10	—	17 10 1
6034	Convent of the Sacred Heart, Ferrybank	40	16	7	4	99 1 6	40	16	7	3	27 3 9
6651	Girls' High School	8	5	—	—	15 12 5	8	5	—	—	2 16 0
6074	Newtown School	14	—	2	—	19 14 6	14	—	—	—	5 7 5
6109	St. Anne's High School, Ursuline Convent	33	23	9	3	107 18 7	33	23	—	—	16 19 1
	TOTALS FOR MUNSTER.	1,120	1,227	601	185	5,491 2 8	1,719	1,227	169	19	994 7 4

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Amount of Grant	Total Amount of Grants	No. of School	
No. of Students recognised for Grant				No. of Students recognised for Grant							
1st Year	2nd Year	3rd Year	4th Year	1st Year	2nd Year	3rd Year	4th Year				
				£ s. d.				£ s. d.	£ s. d.		
11	11	—	—	7 12 4	—	—	—	—	64 1 8	6101	
12	10	—	—	6 17 6	—	—	—	—	32 11 8	6381	
—	—	—	—	—	—	—	6	7 16 0	42 17 2	6147	
—	4	—	—	1 6 10	—	—	—	—	261 16 0	6208	
—	—	—	—	—	—	—	—	—	31 8 11	6294	
23	—	—	—	5 9 10	—	—	—	—	61 4 5	6134	
8	8	—	—	6 0 6	—	—	—	—	50 14 10	6079	
12	—	—	—	19 11 10	—	—	—	—	59 1 4	6380	
20	16	1	—	10 15 4	—	—	—	—	66 7 9	6229	
15	14	—	—	8 7 6	—	—	—	—	107 9 11	6198	
—	—	—	—	—	22	7	—	22 3 9	79 19 7	6148	
—	—	—	—	—	5	6	9	14 9 6	135 10 9	6049	
19	11	7	—	11 0 6	—	—	—	—	115 15 10	6183	
—	—	—	—	—	8	5	—	5 18 7	27 14 1	6391	
—	—	—	—	—	—	—	—	—	13 13 2	6099	
—	—	—	—	—	—	—	—	—	110 13 2	6303	
20	13	—	—	11 15 4	—	—	—	—	62 4 4	6214	
—	—	—	—	—	—	—	—	—	46 4 1	6640	
17	—	—	—	6 2 1	—	—	—	—	55 16 6	6204	
13	9	—	—	6 4 10	—	—	—	—	35 9 4	6291	
—	—	—	—	—	—	—	—	—	59 8 4	6631	
10	10	—	—	19 6 0	—	—	—	—	84 16 4	6012	
—	21	—	—	8 4 1	—	—	—	—	124 7 6	6118	
—	—	—	—	—	—	—	—	—	82 9 6	6185	
—	—	—	—	—	26	0	9	29 3 7	155 8 10	6034	
—	—	—	—	—	—	—	4	5 2 1	23 10 6	6631	
9	2	—	—	4 8 4	—	—	—	—	29 10 3	6074	
—	—	—	—	—	24	—	7	21 16 4	146 14 0	6100	
693	308	22	12	306 17 1	226	65	119	29	372 6 8	7,074 13 4	—

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	ULSTER.					£ s. d.					£ s. d.
	Co. ANTRIM :										
6796	Ballyshore : Intermediate School.	8	6	—	—	17 8 1	8	6	3	—	6 2 9
6119	Ballymena Academy.	65	40	1	—	176 7 3	65	40	—	—	23 14 11
6244	Ballymoney : Intermediate School.	29	19	2	—	74 16 11	29	19	6	1	27 13 6
6551	Carriekfergus : Ladies' Collegiate School.	7	5	5	5	43 2 10	7	5	2	1	8 16 11
6199	Larne : Grammar School.	17	8	7	1	62 16 1	17	8	—	—	6 10 4
6257	Larne : Intermediate School.	5	5	1	—	14 4 5	5	5	2	1	8 16 4
6947	Larne : Oriel Collegiate School.	2	3	—	—	6 10 5	2	3	—	—	1 7 9
6028	Lisburn : Convent of the Sacred Heart of Mary.	14	—	—	—	16 17 5	14	—	—	—	5 4 3
6194	Lisburn : Intermediate School.	23	10	5	—	73 7 11	23	10	—	—	7 4 6
6114	Lisburn : Ulster Provincial School.	21	5	—	—	26 14 2	21	5	4	2	12 12 11
	Co. DUBLIN or BELFAST :										
6830	Christian Brothers' Schools, St. Mary's.	35	16	18	5	110 6 4	35	16	—	—	15 9 2
6299	Christian Brothers' Schools, St. Patrick's.	31	30	—	—	78 3 0	31	30	—	—	18 14 7
6635	Christian Brothers' Day Trades Preparatory School.	46	31	16	—	352 12 2	46	31	16	—	61 15 7
6175	Collegiate School, Brookvale Avenue.	9	12	3	2	34 15 5	9	12	4	2	12 18 6
6124	Girls' Collegiate School, Mount Prospect.	9	9	4	—	32 17 10	9	9	3	—	10 14 11
6192	Mercantile College.	44	22	4	5	120 19 9	44	22	—	—	19 0 0
6218	Methodist College.	35	46	5	—	137 18 4	35	46	—	—	17 11 2
6684	Municipal Day Trades Preparatory School.	82	49	10	—	535 8 6	82	49	10	—	142 17 9
6186	Princess Gardens School.	27	12	5	2	60 13 5	27	12	5	—	19 12
6318	Rosetta High School.	9	4	4	—	31 0 11	9	4	2	2	7 9 1
6032	Royal Academical Institution.	130	80	25	12	504 10 1	130	80	—	—	63 9 18
6049	Royal Academy.	27	24	13	7	153 0 8	27	24	—	—	16 3 7
6164	St. Dominic's High School.	14	16	1	—	40 13 4	14	16	—	—	8 3 2
6095	St. Malachy's College.	51	20	11	—	133 14 3	51	20	—	—	21 17 6
6071	Victoria College.	26	21	7	1	79 2 3	26	21	5	6	38 17 5
	Co. ARMAUGH :										
6290	Armagh : Christian Brothers' Schools.	12	9	5	—	42 8 10	12	9	—	—	6 19 2
6055	Armagh : Royal School.	52	18	4	2	60 1 1	52	18	—	—	12 10 2
6053	Lurgan College.	11	13	7	—	46 15 2	11	13	—	—	5 16 10
6371	Portadown : Alexandra School.	—	6	1	—	3 5 4	—	6	—	—	2 4 3
6333	Portadown : Cavendish College.	7	—	—	—	5 5 6	7	—	—	—	1 7 6
6361	Portadown : Day Trades Preparatory School.	18	6	2	—	65 17 4	18	6	2	—	29 4 1
6353	Portadown : Ladies' School.	15	3	—	—	38 19 6	15	3	2	—	9 18 3



## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION				DOMESTIC ECONOMY				Total Amount of Grants	No. of School		
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant					Amount of Grant	
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.				£ s. d.	£ s. d.		
—	—	—	—	—	—	—	—	—	23 10 10	6796	
—	—	—	—	—	—	—	—	—	200 2 2	6119	
15	7	—	—	10 14 8	14	12	3	3	22 19 1	136 4 2	6844
—	—	—	—	—	—	—	—	—	—	48 19 9	6551
—	—	—	—	—	—	—	—	—	—	69 6 5	6199
—	—	—	—	—	5	4	3	2	7 17 2	30 17 11	6297
—	—	—	—	—	—	—	—	—	—	7 18 2	6947
—	—	—	—	—	14	—	5	2	12 1 7	34 3 3	6028
—	—	—	—	—	—	—	—	—	—	80 11 11	6194
—	—	—	—	—	—	—	—	—	—	39 7 1	6114
—	—	—	—	—	—	—	—	—	—	120 15 6	6080
—	—	—	—	—	—	—	—	—	—	96 17 7	6299
46	31	16	—	101 14 8	—	—	—	—	—	496 2 5	6685
—	—	—	—	—	—	—	—	—	—	47 16 11	6176
—	—	—	—	—	—	—	—	—	—	43 12 9	6184
—	—	—	—	—	—	—	—	—	—	139 16 9	6192
—	—	—	—	—	—	—	7	—	8 6 10	163 16 4	6318
82	49	19	—	182 4 5	—	—	—	—	—	910 19 8	6684
—	—	—	—	—	—	—	—	—	—	30 19 5	6186
—	—	—	—	—	—	—	—	—	—	38 19 0	6318
—	—	—	—	—	—	—	—	—	—	587 19 11	6032
—	—	—	—	—	—	—	—	—	—	169 4 3	6049
—	—	—	—	—	—	—	—	—	—	48 16 6	6164
—	—	—	—	—	—	—	—	—	—	155 11 9	6095
—	—	—	—	—	—	—	13	2	17 7 9	133 7 5	6071
—	—	—	—	—	—	—	—	—	—	49 8 0	6209
—	—	—	—	—	—	—	—	—	—	81 11 3	6055
—	—	—	—	—	—	—	—	—	—	62 12 0	6063
—	—	—	—	—	—	—	—	—	—	10 9 7	6371
—	—	—	—	—	—	—	—	—	—	6 13 0	6338
13	6	2	—	28 18 8	—	—	—	—	—	113 0 1	6861
—	—	—	—	—	—	—	—	—	—	48 18 2	6353

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				DRAWING					
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. CAVAN :					£ s. d.					£ s. d.
6181	Cavan : Royal School .	8	8	6	—	32 18 11	8	8	—	—	7 1 11
6124	Cavan : St. Patrick's College	21	24	21	—	93 5 5	21	24	—	—	12 3 2
	Co. DONEGAL :										
6273	Lettickenny : Loreto Convent	16	11	—	—	38 9 4	16	11	3	2	17 6 1
6807	Lettickenny : St. Eunan's College	18	12	6	—	43 9 0	18	12	—	—	7 18 10
6062	Lifford : Prior Schools .	18	13	2	5	53 12 6	18	13	—	—	12 19 5
6087	Raphoe : Royal School .	17	9	12	6	121 5 0	17	9	—	—	11 2 3
	Co. DOWY :										
6206	Banbridge : Academical Institution	19	15	4	—	59 4 2	19	15	—	—	9 18 1
6808	Banbridge : Ercechoir Academy	8	3	7	—	32 16 3	8	3	—	—	3 4 9
6857	Bangor : Endowed School	19	15	8	—	57 12 1	19	15	—	—	9 6 2
6316	Bangor : Glenola School	6	5	2	—	15 11 0	6	5	—	—	5 0 3
6226	Bangor : Ladies' Collegiate School	4	4	1	—	10 18 4	4	4	—	—	2 14 0
6222	Bangor : Ladies' School, Dumbas	4	2	4	—	17 18 9	4	2	—	—	2 13 11
6075	Bellahy : Upper Sullivan School	18	12	7	6	97 3 6	18	12	4	—	16 11 3
6171	Bewry : Christian Brothers' Schools	14	10	9	—	50 4 5	14	10	—	—	6 7 10
6263	Bewry : Intermediate School	20	21	—	—	40 12 4	20	21	—	—	9 15 0
6092	Bewry : St. Colman's College	8	12	3	4	53 14 4	8	12	4	3	12 12 9
	Co. FERMANAGH :										
6169	Enniskillen : Portora Royal School	10	20	3	4	56 0 11	10	20	—	—	7 14 1
6578	Enniskillen : St. Michael's Intermediate School	18	10	7	—	39 17 2	18	10	—	—	7 4 5
	Co. LONDONDERRY :										
6136	Coleraine : Academical Institution	29	20	16	—	105 8 5	29	20	2	—	21 3 8
6126	Coleraine : Gordonville High School	31	18	—	—	74 5 4	31	18	5	—	17 13 7
6895	Coleraine : Ursuline Convent	10	7	—	—	24 9 7	10	7	—	—	6 7 4
6288	Limavady : Roebank School	5	3	—	—	10 11 8	5	3	1	—	5 18 7
6730	Marqueson : Intermediate School, Coleraine	14	5	—	—	29 3 9	14	5	3	—	8 19 11
6588	Marshall : Rainey Endowed School	19	20	—	—	56 11 8	19	20	3	—	14 8 7
	Co. MONAGHAN OF LONDONDERRY :										
6083	Christian Brothers' School, Brown-of-the-Hill	24	13	15	—	87 12 0	24	13	—	—	8 15 1
6549	Convent of Our Lady of Mercy	23	21	1	3	107 15 1	23	21	2	—	23 3 10
6094	Foy's College .	20	17	14	2	91 11 1	20	17	—	—	45 5 5
6140	St. Columb's College .	8	8	5	6	41 14 4	8	8	—	—	5 8 9
6673	St. Lure's College	13	14	—	—	27 19 0	13	14	2	1	10 6 10
6109	Strand House School .	34	30	21	4	207 3 11	34	30	3	—	56 14 0
6058	Victoria High School .	38	30	26	10	354 16 3	38	30	25	10	66 13 8

## SECONDARY SCHOOLS, &amp;c.—continued,

MANUAL INSTRUCTION				Amount of Grant	DOMESTIC ECONOMY				Amount of Grant	Total Amount of Grants	No. of School
No. of Students recognised for Grant					No. of Students recognised for Grant						
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	40 0 10	6181
—	—	—	—	—	—	—	—	—	—	105 6 7	6124
—	—	—	—	—	15	5	2	3	21 19 11	77 15 4	6273
—	—	—	—	—	—	—	—	—	—	51 7 10	6307
—	—	—	—	—	—	—	—	—	—	66 11 11	6062
—	—	—	—	—	—	—	—	—	—	132 7 3	6067
—	—	—	—	—	—	—	—	—	—	69 2 3	6296
—	—	—	—	—	—	—	—	—	—	36 1 0	6606
—	—	—	—	—	—	—	—	—	—	66 16 3	6637
—	—	—	—	—	—	—	—	—	—	20 11 3	6316
—	—	—	—	—	—	—	—	—	—	13 12 4	6226
—	—	—	—	—	—	—	—	—	—	20 12 6	6222
9	5	—	—	6 8 8	—	—	—	—	—	120 3 5	6075
—	—	—	—	—	—	—	—	—	—	56 12 3	6171
10	11	—	—	9 2 2	7	11	—	—	8 6 4	87 15 10	6263
—	—	—	—	—	—	—	—	—	—	66 7 1	6092
—	—	—	—	—	—	—	—	—	—	63 15 0	6169
—	—	—	—	—	—	—	—	—	—	47 1 7	6573
—	—	—	—	—	—	—	—	—	—	126 12 1	6136
—	—	—	—	—	—	—	—	—	—	91 18 11	6126
—	—	—	—	—	—	—	—	—	—	30 10 11	6695
—	—	—	—	—	—	—	—	—	—	16 10 3	6266
—	—	—	—	—	—	—	—	—	—	26 3 6	6730
—	—	—	—	—	—	—	—	—	—	71 0 3	6368
23	13	—	—	14 3 4	—	—	—	—	—	110 10 5	6068
—	—	—	—	—	6	—	4	—	13 11 3	144 10 2	6549
—	—	—	—	—	—	—	—	—	—	106 16 6	6094
—	—	—	—	—	—	—	—	—	—	47 3 1	6180
—	—	—	—	—	—	—	—	—	—	38 5 10	6073
—	—	—	—	—	—	—	—	—	—	243 17 11	6199
—	—	—	—	—	—	—	—	—	—	421 9 11	6058

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE				Amount of Grant	DRAWING				Amount of Grant
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
6643	Co. MONAGHAN: Carrickmacross: Patrician Brothers' School.	13	—	—	—	£ s. d. 12 9 4	13	—	—	—	£ s. d. 3 19 10
6223	Carrickmacross: St. Louis' Convent	27	12	12	9	166 10 11	27	12	3	—	22 11 8
6213	Carrickmacross: Viscount Weymouth's Grammar School	7	4	3	—	14 19 3	7	4	—	—	2 8 4
6196	Monaghan: Christian Brothers' Schools	18	9	2	—	27 7 10	18	9	—	—	5 11 0
6225	Monaghan: St. Louis' Convent	40	25	13	—	156 7 4	40	25	—	—	25 4 8
6078	Monaghan: St. Macarten's Seminary	23	12	18	9	91 17 4	23	12	—	—	7 6 3
6322	Co. TYRONE: Cookstown Academy	11	12	3	—	35 13 4	11	12	—	—	6 8 11
6128	Cookstown: Ladies' School	16	10	5	—	45 19 9	16	10	7	1	20 11 1
6006	Dungannon: Girls School	14	9	2	—	40 12 7	14	9	—	—	9 7 8
6281	Dungannon: Royal School	18	19	9	—	67 11 7	18	19	—	—	11 4 2
6096	Dungannon: St. Patrick's Academy	6	6	2	—	19 2 2	6	6	—	—	2 15 6
6676	Omagh Academy	4	7	2	—	19 9 9	4	7	—	—	4 12 4
6189	Omagh: Christian Brothers' School	20	22	6	2	75 18 9	20	22	—	—	7 19 1
6083	Omagh: High School	17	6	7	—	48 11 8	17	6	7	—	13 19 11
6211	Omagh: Loretto Convent	16	14	7	4	82 3 1	16	14	—	4	13 3 4
TOTALS FOR ULSTER.		1,628	1,132	675	116	5,260 4 8	1,628	1,132	140	36	1,194 9 9
CONNAUGHT.											
6039	Co. GALWAY: Ballinasloe: St. Joseph's College	15	15	7	4	62 5 3	15	15	—	—	6 13 8
6909	Galway: Dominican College	14	8	—	—	27 0 2	14	8	—	—	4 8 6
6067	Galway: Dominican Convent, Taylor's Hill	12	7	5	—	35 2 2	12	7	5	2	19 1 3
6242	Galway: Grammar School	8	6	4	—	29 13 5	8	6	—	—	4 2 5
6366	Galway: St. Ignace's College	14	16	5	—	38 14 6	14	16	—	—	10 14 2
6676	Galway: St. Joseph's Seminary	15	11	—	—	26 7 10	15	11	—	—	7 15 11
6220	Tuam: Christian Brothers' Schools	19	17	—	—	71 1 9	19	17	—	—	13 4 9
6527	Tuam: St. Jarlath's College	23	24	17	16	166 4 1	23	24	—	—	12 7 3
6258	Co. MAYO: Ballina: St. Muredach's College	22	19	11	—	81 3 7	22	19	—	—	11 19 8
6202	Keshmoghagh: St. Louis' Convent	32	15	5	5	120 6 9	32	15	—	—	21 7 3
6278	Westport: Christian Brothers' Schools	20	10	13	—	71 7 2	20	10	—	—	7 19 6
6265	Co. ROSCOMMON: Ballinacorney: Diocesan College	15	13	9	—	46 7 3	15	13	—	—	8 2 9

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of School
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
—	—	—	—	£ s. d.	—	—	—	—	£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	16 9 2	6643
—	—	—	—	—	28	11	12	9	87 7 6	276 10 1	6223
—	—	—	—	—	—	—	—	—	—	17 7 7	6213
13	—	—	—	4 4 7	—	—	—	—	—	37 3 5	6196
—	—	—	—	—	13	3	12	4	43 4 7	224 16 7	6225
—	—	—	—	—	—	—	—	—	—	98 17 7	6078
—	—	—	—	—	—	—	—	—	—	42 2 3	6322
—	—	—	—	—	—	—	—	—	—	66 10 10	6128
—	—	—	—	—	—	—	—	—	—	50 0 3	6096
—	—	—	—	—	—	—	—	—	—	78 15 9	6231
—	—	—	—	—	—	—	—	—	—	21 17 8	6090
—	—	—	—	—	—	—	—	—	—	24 2 1	6676
—	—	—	—	—	—	—	—	—	—	83 18 10	6189
—	—	—	—	—	—	—	—	—	—	102 11 7	6043
—	—	—	—	—	—	—	9	5	13 18 0	109 4 5	6211
221	122	25	—	355 11 2	102	46	79	39	257 0 0	8,067 5 7	—
3	6	5	—	7 8 0	—	—	—	—	—	76 6 11	6639
—	—	—	—	—	15	—	3	2	9 11 3	40 19 11	6909
—	—	—	—	—	17	5	3	—	13 12 9	60 16 2	6067
—	—	—	—	—	—	—	—	—	—	33 15 10	6247
—	—	—	—	—	—	—	—	—	—	49 8 3	6365
15	10	—	—	6 13 7	—	—	—	—	—	40 17 4	6076
19	17	—	—	14 1 5	—	—	—	—	—	98 7 11	6220
1	2	—	—	1 18 8	—	—	—	—	—	180 10 0	6527
6	1	—	—	3 9 5	—	—	—	—	—	96 12 8	6258
—	—	—	—	—	21	—	7	3	26 9 8	173 3 8	6262
20	10	—	—	9 9 2	—	—	—	—	—	88 15 10	6273
7	8	—	—	3 19 0	—	—	—	—	—	58 9 0	6245

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE					DRAWING				
		No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant
		1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year	
	Co. SLIGO :					£ s. d.					£ s. d.
6899	Sligo : Grammar School, .	11	18	15	—	125 7 4	11	18	—	—	7 15 1
6141	Sligo : Summerhill College	35	22	43	7	361 11 0	35	22	—	—	17 13 6
6918	Sligo : Day Trades Prepara- tory School	9	10	—	—	50 8 8	9	10	—	—	17 11 8
6197	Sligo : Ursuline Convent	42	25	13	—	171 3 2	42	23	—	—	39 11 0
	TOTALS FOR CONNAUGHT,	306	239	147	32	1,484 4 1	306	239	5	2	203 9 4
	Totals for Leinster, . (108 Schools).	2,339	1,735	869	218	8,172 12 9	2,359	1,785	147	27	1,508 2 10
	Totals for Munster, . (81 Schools).	1,729	1,327	691	135	5,491 2 3	1,719	1,327	109	19	994 7 4
	Totals for Ulster, . (78 Schools).	1,628	1,132	473	116	5,360 4 8	1,628	1,132	140	36	1,194 9 9
	Totals for Connaught, (16 Schools).	306	239	147	32	1,484 4 1	306	239	5	2	203 9 4
	TOTALS FOR IRELAND, (283 Schools).	6,013	4,353	2,081	551	21,318 3 9	6,012	4,333	401	84	3,900 9 3

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION					DOMESTIC ECONOMY					Total Amount of Grants	No. of Schools
No. of Students recognised for Grant				Amount of Grant	No. of Students recognised for Grant				Amount of Grant		
1st Year	2nd Year	3rd Year	4th Year		1st Year	2nd Year	3rd Year	4th Year			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	133 3 5	6899
15	19	1	—	10 3 5	—	—	—	—	—	389 7 11	6141
9	10	—	—	19 11 6	—	—	—	—	—	87 11 10	6918
—	—	—	—	—	39	19	—	—	23 16 10	234 13 0	6197
199	74	6	—	76 14 2	83	15	13	5	83 12 6	1,848 0 1	—
671	220	58	—	458 11 7	162	76	171	81	454 5 11	10,593 13 1	—
463	336	22	12	306 17 1	226	65	119	29	372 6 8	7,074 13 4	—
221	122	28	—	355 11 2	192	46	70	30	257 0 0	8,067 5 7	—
180	74	6	—	76 14 2	83	15	13	5	83 12 6	1,848 0 1	—
1,463	794	114	12	1,197 14 0	573	202	373	145	1,167 5 1	27,583 12 1	—

TABLE IV.—LIST OF PRIMARY SCHOOLS showing the Grants paid by the Department during the Financial Year, 1st April, 1910, —31st March, 1911, in respect of Instruction in Drawing and Manual Work.

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of scholars under instruction.	Amount of Grant.	
	LEINSTER.			£ s. d.		£ s. d.	£ s. d.
6170	Co. CARLOW : Carlow : Christian Brothers' Schools.	31.1.11	210	21 0 0	—	—	21 0 0
6260	Carlow : Convent of Mercy.	30.11.10	29	(a) 2 8 4	—	—	2 8 4
6284	Co. DUBLIN : Artane : Industrial School.	31.10.10	779	77 18 0	192	55 15 7	133 13 7
6401	Blackrock : Bleath Industrial School.	31.1.11	109	7 10 0	52	8 10 9	16 0 9
6357	Castleknock : Morgan's Endowed School.	30.11.10	7	(a) 1 5 0	—	—	1 5 0
6150	Kingstown : Christian Brothers' School.	30.11.10	244	(a) 15 5 0	—	—	15 5 0
6327	Monkstown : Carrigra Park Industrial School.	31.12.10	164	15 8 0	40	17 2 0	32 10 0
6366	Co. DUBLIN OF DUBLIN : Christian Brothers' Schools, Francis Street.	31.1.11	311	31 2 0	—	—	31 2 0
6340	Christian Brothers' Schools, Great Strand Street.	31.12.10	236	23 12 0	24	7 11 7	31 3 7
6319	Christian Brothers' Schools, Marino.	31.12.10	294	22 8 0	—	—	22 8 0
6156	Christian Brothers' Schools, N. Richmond Street.	31.12.10	350	35 0 0	29	9 13 7	44 13 7
6358	Christian Brothers' Schools, St. Laurence O'Toole.	31.12.10	174	17 8 0	26	7 1 2	24 9 2
6339	Christian Brothers' Schools, St. Mary's Place.	31.12.10	271	27 2 0	22	6 7 7	33 9 7
6117	Christian Brothers' Schools, Sygne Street.	31.1.11	393	39 6 0	—	—	39 6 0
6344	Christian Brothers' Schools, Westland Row.	31.1.11	300	22 10 0	—	—	22 10 0
6155	O'Brien Institution, .	31.10.10	96	9 12 0	—	—	9 12 0
6115	St. Vincent's Orphanage, .	31.1.11	58	(b) 9 11 4	45	15 15 0	25 6 4
6217	Co. KILDARE : Athy : Christian Brothers' Schools.	31.1.11	129	12 18 0	—	—	12 18 0
6340	Athy : St. Mary's School, Convent of Mercy.	30.11.10	12	(a) 1 5 0	—	—	1 5 0
6351	Kilcock Christian Brothers' Schools.	31.1.11	75	5 12 0	—	—	5 12 0
6325	Monasterevan : Christian Brothers' Schools.	31.1.11	91	6 10 6	—	—	6 10 6
6231	Naas : Christian Brothers' Schools.	31.1.11	99	7 8 6	—	—	7 8 6
6304	Co. KILKENNY : Callan : Christian Brothers' Schools.	30.11.10	195	(a) 6 11 3	—	—	6 11 3
6059	Kilkenny : Christian Brothers' Schools.	31.1.11	152	11 8 0	—	—	11 8 0
6299	Thomastown : St. Michael's Convent.	30.11.10	15	(a) 1 5 0	—	—	1 5 0
6193	Co. LOUTH : Drogheda : Christian Brothers' Schools, Sunday Gate.	31.10.10	144	14 8 0	—	—	14 8 0
6239	Drogheda : Christian Brothers' Schools, Westgate.	31.10.10	94	9 8 0	—	—	9 8 0

(a) 10 months' grant.

(b) 20 months' grant.



TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No of scholars under Instruction.	Amount of Grant.	
6168	Co. MEATH : Kells : Christian Brothers' Schools.	31.10.10	123	£ s. d. 12 6 0	—	—	12 6 0
6170	QUEEN'S COUNTY : Maryborough : Christian Brothers' Schools.	30.11.10	182	(a) 11 7 6	29	£ s. d. 4 9 9	15 17 3
6362	Portlington : Christian Brothers' Schools.	31.12.10	107	10 14 0	—	—	10 14 0
6461	Co. WESTMIDLAND : Malling : Christian Brothers' Schools.	30.11.10	143	10 14 6	—	—	10 14 6
6104	Co. WEXFORD : Ennisceorthy : Christian Brothers' Schools.	31.1.11	223	16 14 6	—	—	16 14 6
6209	Gorey : Christian Brothers' Schools.	31.1.11	138	10 7 0	—	—	10 7 0
6161	New Ross : Christian Brothers' Schools.	31.1.11	108	12 12 6	—	—	12 12 6
6158	Wexford : Christian Brothers' Schools, George's Street.	31.1.11	100	10 0 0	—	—	10 0 0
6341	Wexford : Christian Brothers' Schools, Joseph St.	31.1.11	194	19 8 0	—	—	19 8 0
TOTALS FOR LEINSTER, MUNSTER.		—	6,236	569 9 11	459	132 7 0	701 16 11
6137	Co. CLARE : Ennis : Christian Brothers' Schools.	30.9.10	179	13 8 6	—	—	13 8 6
6283	Ennistymon : Christian Brothers' Schools.	30.9.10	85	6 7 6	—	—	6 7 6
6295	Kilrush : Christian Brothers' Schools.	30.9.10	98	7 7 0	—	—	7 7 0
6254	Co. CORK : Baltimore : Fishery School	30.6.10	105	(b) 7 8 9	45	15 18 10	23 7 7
6246	Charleville : Christian Brothers' Schools.	30.11.10	64	(a) 4 0 0	—	—	4 0 0
6345	Clonakilly : St. Aloysius Industrial School.	30.9.10	85	8 10 0	—	—	8 10 0
6240	Doneraile : Christian Brothers' Schools.	31.12.10	64	3 4 0	—	—	3 4 0
6167	Fernoy : Christian Brothers' Schools.	31.1.11	143	10 13 0	—	—	10 13 0
6131	Midleton : Christian Brothers' Schools.	31.1.11	179	13 8 6	—	—	13 8 6
6110	Mitchelstown : Christian Brothers' Schools.	31.1.11	101	5 1 0	—	—	5 1 0
6430	Upton : Dunsfort Industrial School.	31.12.10	176	17 12 0	35	14 1 0	31 13 0
6328	Youghal : Christian Brothers' Schools.	31.1.11	176	13 4 0	—	—	13 4 0
6352	Co. DUBLIN OF CORK : Christian Brothers' Schools, Blarney Street.	31.5.10	173	17 6 0	17	3 2 6	20 8 6
6013	Christian Brothers' Schools, Our Lady's Mount.	31.5.10	488	48 16 0	105	19 16 0	68 12 0
6354	Christian Brothers' Schools, Sullivan's Quay.	31.5.10	257	25 14 0	30	5 17 2	31 11 2
6334	Greenmount Industrial School.	31.5.10	143	14 6 0	39	13 0 2	27 6 2
6154	Co. KERRY : Dingle : Christian Brothers' Schools.	31.1.11	161	12 1 6	—	—	12 1 6
6179	Trillick : Christian Brothers' Schools.	31.1.11	192	19 4 0	—	—	19 4 0
6349	Trillick : St. Joseph's Industrial School.	[31.1.11	94	9 8 0	19	4 17 9	14 5 9

(a) 10 months' grant.

(b) 17 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No of scholars under instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6334	Co. LIMERICK : Doon : Christian Brothers' Schools.	30.11.10	52	(a) 4 6 8	—	—	4 6 8
6335	Glin : District Industrial School.	30.11.10	106	(a) 8 16 8	38	15 1 2	23 17 10
6365	Co. BOROUGH OF LIMERICK : Christian Brothers' Schools, St. John's.	30.11.10	156	(a) 15 10 0	—	—	15 10 0
6364	Christian Brothers' Schools, St. Mary's.	30.11.10	195	(a) 16 5 0	—	—	16 5 0
6363	Christian Brothers' Schools, St. Munchin's.	30.11.10	119	(a) 6 17 6	—	—	6 17 6
6160	Christian Brothers' Schools, Sexton Street.	30.11.10	392	(a) 24 10 0	—	—	24 10 0
6336	Industrial School, Sexton Street.	30.11.10	160	(a) 13 6 3	45	16 4 2	29 10 10
6044	Co. TIPPERARY : Carrick-on-Bois : Christian Brothers' Schools, St. Mary's.	31.12.10	99	9 18 0	—	—	9 18 0
6101	Carrick-on-Bois : Christian Brothers' Schools, Mount St. Nicholas.	31.12.10	94	9 8 0	—	—	9 8 0
6390	Carrick-on-Bois : Convent of Mercy.	31.12.10	20	2 0 0	—	—	2 0 0
6361	Cashel : Christian Brothers' Schools.	31.12.10	60	4 10 0	—	—	4 10 0
6294	Cloameli Christian Brothers' Schools, St. Mary's.	31.12.10	124	9 6 0	—	—	9 6 0
6134	Cloameli Christian Brothers' Schools, SS. Peter & Paul.	31.12.10	175	13 2 6	—	—	13 2 6
6084	Cloameli : St. Joseph's Industrial School.	30.6.19	181	(b) 3 16 5	48	5 0 2	8 16 7
6229	Nenagh : Christian Brothers' Schools.	31.12.10	133	10 7 0	—	—	10 7 0
6166	Thurles : Christian Brothers' Schools.	31.12.10	197	14 15 6	—	—	14 15 6
6183	Tipperary : Christian Brothers' Schools.	30.11.10	146	(a) 9 2 6	—	—	9 2 6
6214	Co. WATERFORD : Dungarvan : Christian Brothers' Schools.	31.12.10	154	11 11 0	—	—	11 11 0
6204	Lismore : Christian Brothers' Schools.	31.12.10	90	6 15 0	—	—	6 15 0
6291	Tramore : Christian Brothers' Schools.	31.12.10	71	7 2 0	—	—	7 2 0
6118	Co. BOROUGH OF WATERFORD : Christian Brothers' Schools, Mount Zion.	31.12.10	305	22 17 6	29	2 4 0	25 1 6
6293	Christian Brothers' Schools, St. John's.	31.12.10	164	12 6 0	—	—	12 6 0
6292	Christian Brothers' Schools, St. Patrick's.	31.12.10	80	6 0 0	—	—	6 0 0
TOTALS FOR MUNSTER		—	6,211	499 9 8	450	115 2 11	614 12 7
ULSTER.							
6373	Co. BOROUGH OF BELFAST : Balmoral Industrial School	30.9.10	330	24 15 0	32	25 7 2	50 2 2
6398	Christian Brothers' Schools, St. Malsch's.	30.9.10	106	7 19 0	—	—	7 19 0
6080	Christian Brothers' Schools, St. Mary's.	30.9.10	143	14 6 0	—	—	14 6 0
6299	Christian Brothers' Schools, St. Patrick's.	30.9.10	181	13 11 6	—	—	13 11 6
6030	Malone Protestant Reformatory.	30.9.10	78	7 16 0	67	20 12 10	28 8 10
6200	Co. ARMAGH : Armagh : Christian Brothers' Schools	30.8.10	108	10 16 0	—	—	10 16 0

(a) 10 months' grant.

(b) 7 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—*continued.*

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No of scholars under instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6963	Co. DONEGAL : Killybegs : St. Columba's Industrial School.	31.5.10	138	13 16 0	43	28 11 4	42 7 4
6171	Co. DOWN : Newry : Christian Brothers' Schools.	31.12.10	196	(a) 11 0 6	—	—	11 0 6
6083	Co. DUBLIN OF LONDON- DERRY : Christian Brothers' Schools, Brow-of-the-Hill.	31.1.11	196	14 14 0	—	—	14 14 0
6126	Co. MONAGHAN : Monaghan : Christian Brothers' Schools.	30.11.10	111	(b) 9 0 4	—	—	9 0 4
6189	Co. TYRONE : Omagh : Christian Brothers' Schools.	30.9.10	72	7 4 0	—	—	7 4 0
TOTALS FOR ULSTER,		—	1,659	134 18 4	197	74 11 4	209 9 8
CONNAUGHT.							
6337	Co. GALWAY : Galway : Saltmill Industrial School.	31.10.10	201	20 2 0	60	13 17 2	33 19 2
6326	Letterfrack : St. Joseph's Industrial School.	30.9.10	149	14 18 0	39	13 4 0	28 2 0
6210	Tulla : Christian Brothers' Schools.	30.9.10	118	8 17 0	20	4 0 8	12 17 8
6232	Co. MAYO : Ballinrobe : Christian Brothers' Schools.	30.9.10	93	6 19 6	—	—	6 19 6
6273	Westport : Christian Brothers' Schools.	30.9.10	142	10 13 0	—	—	10 13 0
TOTALS FOR CONNAUGHT		—	708	61 9 6	119	31 1 10	93 11 4
TOTALS FOR LEINSTER (36 Schools),			6,230	569 9 11	459	132 7 0	701 16 11
TOTALS FOR MUNSTER (42 Schools),			6,211	499 9 8	450	115 2 11	614 12 7
TOTALS FOR ULSTER (11 Schools),			1,659	134 18 4	197	74 11 4	209 9 8
TOTALS FOR CONNAUGHT (5 Schools),			708	61 9 6	119	31 1 10	93 11 4
TOTALS FOR IRELAND (94 Schools),			14,803	1,265 7 5	1,225	353 3 1	1,618 10 6

(a) 9 months' grant.

(b) 13 months' grant.

TABLE V.—STATEMENT showing the OCCUPATIONS of STUDENTS attending Schools and Classes conducted under the conditions of Schemes of Technical Instruction in Non-Agricultural Subjects.

## URBAN SCHEMES.

## LIMERICK.

	Dublin.	Bathmains and Rathgar.	Pembroke.	Kingstown.	Devoehda.	Wexford.	Blackrock.	Dewy.	Athlone.	New Ross.	Ennisceorthy.	Totals for Limerick.
Number of individual students enrolled.	1,872	747	561	398	250	185	219	141	219	132	125	4,361
Number enrolled in—												
Preparatory Course Classes.	208	61	41	30	45	48	47	28	25	31	28	521
Commercial Classes (including Language Classes).	619	468	92	75	95	75	78	36	76	23	29	1,661
Science (Pure and Applied) and Mathematics Classes.	903	—	233	20	62	18	28	8	8	10	14	1,384
Handicraft Classes.	28	—	55	16	6	12	19	14	76	—	—	220
Domestic Science Classes.	244	278	129	236	63	26	94	51	43	53	51	1,220
Art Classes.	135	—	26	32	35	40	29	5	15	24	—	320
Classes in Lace and Crochet Making, Embroidery, Spinning, Drawn-Thread Work, &c.	—	—	—	—	—	—	19	—	—	—	—	19
Other Classes.	—	—	—	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.												
Young Men.												
Persons engaged in Farming Occupations.	1	—	—	5	1	—	—	8	11	—	—	26
Building Trades, including Workers in Wood, &c.	59	2	9	5	14	1	—	12	14	5	9	124
Coach and Car Builders.	6	—	—	—	—	—	—	—	1	1	1	10
Engineers, Workers in Metal, Draughtsmen, &c.	224	4	60	2	2	29	5	3	—	—	—	320
Architects, Surveyors, Civil Engineers, &c.	29	—	1	1	—	—	—	—	—	2	—	33
Electrical Engineers, Scientific Instrument Makers, &c.	75	1	7	—	7	—	—	—	—	—	—	89
Printing Trades—Compositors, Lithographers, &c.	58	—	4	—	—	—	—	1	4	—	—	66
Textile Industries—Designers, Weavers, &c.	6	—	2	—	19	—	—	—	9	—	—	35
Painters, Decorators, &c.	35	—	1	1	1	2	—	2	—	2	—	42
Plumbers, Gasfitters, &c.	30	—	—	—	3	—	—	—	—	1	—	34
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	17	—	—	—	1	—	—	—	—	—	2	20
Chemists, Analysts, Druggists, &c.	43	—	1	—	3	—	—	—	—	—	—	47
Salesmen, Shopkeepers, Warehousemen, &c.	32	17	27	3	27	6	8	8	25	5	22	121
Clerks in Commercial Offices.	158	145	46	17	12	7	15	5	19	2	15	309
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	48	123	9	2	2	4	8	1	—	—	1	200
Teachers, Assistant Teachers, Pupil Teachers, &c.	28	6	5	2	1	4	—	—	2	—	—	38
Students (University, Law, Medical).	55	1	2	—	—	3	—	—	5	—	3	64
Occupations not included in the above Classes.	291	4	86	5	5	2	15	—	3	6	—	421
Boys just left School or College.	—	11	19	20	12	2	9	2	—	1	—	54
Boys still in attendance at School or College.	26	7	10	4	7	10	12	9	17	8	—	103
No occupation stated.	18	2	45	6	—	7	—	9	7	—	2	120
Total Number of Young Men.	1,351	322	341	71	118	85	62	67	111	35	56	2,368
Young Women.												
Persons engaged in Farming Occupations.	—	—	—	—	—	—	—	27	—	—	—	27
Domestic Servants.	14	42	9	59	10	4	18	—	8	10	12	126
Printing Trades.	—	2	1	—	—	1	—	3	—	—	—	6
Dressmakers, Milliners, &c.	32	7	5	6	5	4	13	—	1	3	—	60
Textile Industries—Designers, Weavers, &c.	1	15	1	—	10	—	—	1	—	—	—	26
Factory Workers not included in above.	10	22	1	—	—	—	—	—	9	—	—	41
Workers in Lace, Crochet, Embroidery, Spinning, Drawn Thread Work, &c.	—	—	—	—	—	—	—	—	—	4	—	4
Saleswomen, Shopkeepers, &c.	25	17	11	14	5	7	7	2	12	7	7	105
Clerks, Cashiers, Civil Servants, &c.	24	60	17	25	5	17	8	7	4	3	18	159
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	60	22	22	45	20	30	10	—	—	17	—	204
Occupations not included in above Classes.	19	—	—	—	—	—	—	1	1	—	—	21
Girls just left School or College.	4	22	6	1	2	1	2	1	2	15	22	65
Girls still in attendance at School or College.	35	11	13	3	8	14	26	11	19	49	10	188
No occupation stated.	352	145	117	129	99	22	43	20	44	—	—	621
Total Number of Young Women.	541	424	220	327	132	100	157	74	108	99	69	2,368
Total Number of Students.	1,872	747	561	398	250	185	219	141	219	132	125	4,461

TABLE V.—continued.  
 URBAN SCHEMES—continued.  
 MUNSTER AND CONNAUGHT.

	Cork.	Limerick.	Waterford.	Clonmel.	Trillick.	Queenstown.	Totals for Munster.	Galway.	Sligo.	Totals for Connaught.
Number of individual students enrolled.	1,601	784	445	255	322	94	3,501	259	439	698
Number enrolled in:—										
Preparatory Course Classes.	155	80	68	18	54	—	364	56	51	107
Commercial Classes (including Languages Classes).	290	162	120	79	108	28	787	53	116	163
Science (Pure and Applied) and Mathematics Classes.	406	160	49	45	55	61	748	29	132	161
Handicraft Classes.	53	—	38	—	30	22	143	42	42	90
Domestic Science Classes.	339	231	138	73	107	—	888	46	148	194
Art Classes.	194	152	39	10	72	12	479	36	131	127
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn Thread Work, &c.	170	63	29	63	—	—	325	—	—	—
Other Classes.	—	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.										
Young Men.										
Persons engaged in Farming Occupations.	2	—	4	—	7	—	13	1	1	2
Building Trades, including Workers in Wood, &c.	119	43	18	15	16	11	213	17	21	38
Coach and Car Builders.	2	3	5	10	5	—	26	—	5	5
Engineers, Workers in Metal, Draughtsmen, &c.	97	34	8	5	12	53	189	2	3	5
Architects, Surveyors, Civil Engineers, &c.	37	4	—	1	—	—	42	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	54	6	—	1	—	11	72	2	—	2
Printing Trades—Compositors, Lithographers, &c.	28	13	2	—	2	—	45	3	9	12
Textile Industries—Designers, Weavers, &c.	1	13	—	2	—	—	17	14	—	14
Farmers, Decorators, &c.	23	6	—	—	2	—	31	—	21	21
Painters, Gasfitters, &c.	23	—	14	3	1	4	45	2	2	4
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	20	7	8	—	—	—	35	—	16	16
Chemists, Analysts, Druggists, &c.	30	7	5	1	—	—	43	3	5	8
Salesmen, Shopkeepers, Warehousemen, &c.	65	17	19	9	21	1	132	10	25	35
Clerks in Commercial Offices.	125	59	21	8	27	—	240	9	14	23
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	38	14	10	5	6	10	83	3	—	2
Teachers, Assistant Teachers, Pupil Teachers, &c.	35	23	13	3	13	2	89	6	50	56
Students (University, Law, Medical).	18	1	—	1	3	—	23	8	—	8
Occupations not included in the above Classes.	41	31	10	2	5	3	92	5	1	6
Boys just left School or College.	59	14	—	—	6	2	81	—	—	—
Boys still in attendance at School or College.	13	59	13	12	2	—	107	15	16	31
No occupation stated.	62	9	47	3	1	2	124	21	7	22
Total Number of Young Men.	904	334	197	83	129	70	1,736	120	190	310
Young Women.										
Persons engaged in Farming Occupations.	12	—	—	1	6	—	19	—	—	—
Domestic Servants.	27	6	20	11	23	—	87	10	16	26
Printing Trades.	—	—	—	—	1	—	1	—	—	—
Dressmakers, Milliners, &c.	41	8	5	20	3	—	77	—	23	23
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	15	1	16
Factory Workers not included in above.	—	—	—	—	3	—	3	—	3	3
Workers in Lace, Crochet, Embroidery, Springing, Drawn Thread Work, &c.	133	68	—	71	3	—	275	—	—	—
Saleswomen, Shopkeepers, &c.	64	10	19	16	19	—	128	7	15	22
Clerks, Cashiers, Civil Servants, &c.	54	18	15	6	11	1	105	2	12	14
Teachers, Assistant Teachers, Pupil Teachers.	22	87	32	3	43	2	189	13	63	76
Students (University, Medical).	4	2	—	—	1	—	7	—	—	—
Occupations not included in above Classes.	26	42	12	6	10	—	96	—	64	64
Girls just left School or College.	24	32	—	—	25	3	104	—	—	—
Girls still in attendance at School or College.	18	53	21	15	30	1	123	27	29	56
No occupation stated.	262	144	124	23	15	5	516	65	23	88
Total Number of Young Women.	697	454	245	172	195	15	1,775	129	249	388
Total Number of Students.	1,601	784	445	255	322	94	3,501	259	439	698

TABLE V—continued.—URBAN

	Belfast.	Londonderry.	Newry.	Lurgan (Municipal Scheme).	Lurgan (Convent Scheme).	Ballymena.	Portadown.	Newtownards.	Armagh.	Coleraine.
Number of individual students enrolled.	4,000	506	370	337	105	434	374	260	209	273
Number enrolled in:—										
Preparatory Course Classes.	1,469	72	75	95	96	45	24	41	30	20
Commercial Classes (including Languages Classes).	1,181	70	109	66	14	160	132	54	99	93
Science (Pure and Applied) and Mathematics Classes.	216	130	40	51	—	87	58	16	16	44
Handicraft Classes.	479	—	32	—	—	11	—	—	—	31
Domestic Science Classes.	1,931	193	164	126	45	167	125	134	49	157
Art Classes.	446	193	44	26	20	59	25	20	15	32
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn-Thread Work, &c.	13	—	—	—	—	21	—	—	—	—
Other Classes.	504	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.										
Young Men.										
Persons engaged in Farming Occupations.	6	—	7	—	—	5	1	—	9	6
Building Trades, including Workers in Wood, &c.	244	6	20	9	—	15	5	4	7	5
Coach and Car Builders.	5	1	—	—	—	—	1	1	—	—
Engineers, Workers in Metal, Draughtsmen, &c.	667	36	14	14	—	13	10	18	2	10
Architects, Surveyors, Civil Engineers, &c.	34	12	1	—	—	2	3	1	3	5
Electrical Engineers, Scientific Instrument Makers, &c.	79	4	1	—	—	1	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	65	—	1	1	—	1	—	2	2	2
Textile Industries—Designers, Weavers, &c.	395	—	7	42	2	4	16	2	4	11
Painters, Decorators, &c.	36	7	2	—	—	6	1	—	—	2
Plumbers, Gasfitters, &c.	40	7	2	1	—	1	1	2	4	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	41	1	—	—	—	2	—	2	—	1
Chemists, Analysts, Druggists, &c.	81	4	5	1	—	5	6	—	2	2
Salesmen, Shopkeepers, Warehousemen, &c.	325	27	16	14	—	28	8	—	9	18
Clerks in Commercial Offices.	654	27	17	22	—	13	17	21	3	16
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	101	6	4	5	—	14	8	2	12	6
Teachers, Assistant Teachers, Pupil Teachers, &c.	122	26	21	2	—	23	31	3	7	9
Students (University, Law, Medical).	33	—	—	—	—	—	—	—	—	1
Occupations not included in the above Classes.	252	41	29	7	—	10	17	15	4	16
Boys just left School or College.	—	—	—	9	—	3	—	—	—	2
Boys still in attendance at School or College.	24	9	4	12	5	3	5	11	9	17
No occupation stated.	171	4	—	8	1	9	9	1	—	—
Total Number of Young Men.	3,300	213	151	147	12	159	139	89	78	127
Young Women.										
Persons engaged in Farming Occupations.	—	—	—	—	—	—	—	2	—	2
Domestic Servants.	166	10	11	13	1	13	11	4	10	19
Printing Trades.	9	—	2	—	—	—	—	—	1	—
Dressmakers, Milliners, &c.	146	6	16	6	2	24	14	12	12	10
Textile Industries—Designers, Weavers, &c.	134	—	4	13	3	47	10	3	8	1
Factory Workers not included in above.	253	14	70	38	40	1	11	61	—	3
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	30	—	1	1	—	—	—	—	—	1
Saleswomen, Shopkeepers, &c.	84	11	8	7	2	15	14	8	14	18
Clerks, Cashiers, Civil Servants, &c.	314	33	22	11	4	32	18	15	5	15
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	363	42	31	36	12	69	63	15	19	34
Occupations not included in above Classes.	68	—	—	—	—	—	—	—	2	—
Girls just left School or College.	75	1	45	1	4	1	9	4	3	8
Girls still in attendance at School or College.	59	18	5	21	15	1	16	2	22	6
No occupation stated.	1,098	133	—	42	10	84	79	45	35	24
Total Number of Young Women.	2,790	288	219	190	93	325	285	171	131	151
Total Number of Students.	5,090	506	370	337	105	484	374	200	209	278

## SCHEMES—continued.—ULSTER.

Larne.	Bangor.	Banbridge.	Carrickfergus.	Holywood.	Ballymoney (Jt. Urban and Rural).	Dromore.	Warrenpoint.	Totals for Ulster.	
228	300	305	236	143	217	105	92	10,709	Number of individual students enrolled
24	20	57	41	13	25	20	28	2,143	Number enrolled in:—
105	85	58	86	32	32	48	28	3,402	Preparatory Course Classes
82	22	24	41	22	33	—	—	1,597	Commercial Classes (including Languages Classes)
30	9	—	26	7	11	22	—	755	Science (Pure and Applied) and Mathematics Classes.
109	155	189	75	93	64	40	59	3,833	Handicraft Classes
24	—	8	14	9	47	—	—	916	Domestic Science Classes
22	—	—	—	—	—	—	—	81	Art Classes
—	—	—	—	—	—	—	—	594	Classes in Lace and Crochet Making, Embroidery, Sprigging, Drawn-Thread Work, &c.
—	—	—	—	—	—	—	—	—	Other Classes
2	—	1	1	1	17	—	1	57	Persons engaged in Farming Occupations
30	4	1	13	4	6	4	2	349	Building Trades, including Workers in Wood, &c.
—	—	—	—	—	—	2	—	19	Coach and Car Builders
15	—	5	20	—	4	—	—	323	Engineers, Workers in Metal, Draughtsmen, &c.
—	1	—	1	—	1	—	—	64	Architects, Surveyors, Civil Engineers, &c.
2	—	2	2	—	—	—	—	91	Electrical Engineers, Scientific Instrument Makers, &c.
3	2	—	1	—	—	1	—	81	Printing Trades—Compositors, Lithographers, &c.
1	11	15	6	—	2	—	—	531	Textile Industries—Designers, Weavers, &c.
2	—	—	7	—	1	—	1	85	Painters, Decorators, &c.
—	1	—	1	—	—	—	—	60	Plumbers, Gasfitters, &c.
4	—	2	1	—	—	—	—	54	Trades involving Applied Art—Jewellers, Furniture Makers, &c.
2	2	2	1	3	4	2	—	122	Chemists, Analysts, Druggists, &c.
17	4	12	3	6	21	17	1	540	Salesmen, Shopkeepers, Warehousemen, &c.
14	10	9	17	12	8	10	—	772	Clerks in Commercial Offices
3	1	9	1	2	4	2	—	150	Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.
6	4	7	1	—	6	3	1	277	Teachers, Assistant Teachers, Pupil Teachers, &c.
6	—	—	1	2	—	—	—	49	Students (University, Law, Medical)
—	8	1	14	—	21	2	3	434	Occupations not included in the above Classes.
6	9	1	3	—	—	—	2	41	Boys still left School or College
2	10	4	14	1	—	3	7	145	Boys still in attendance at School or College,
—	2	—	—	2	—	—	—	198	No occupation stated.
168	63	71	115	33	95	51	19	4,973	Total Number of Young Men
3	—	—	6	1	16	—	—	34	Persons engaged in Farming Occupations
14	9	4	9	13	2	—	5	314	Domestic Servants
—	—	—	—	—	—	—	—	13	Printing Trades
14	—	8	10	1	12	—	—	293	Dressmakers, Milliners, &c.
4	1	95	3	1	—	—	—	1327	Textile Industries—Designers, Weavers, &c.
3	1	5	—	1	—	—	—	501	Factory Workers not included in above
—	4	—	—	1	—	—	—	38	Workers in Lace, Crochet, Embroidery, Sprigging, Drawn-Thread Work, &c.
14	3	10	11	5	12	3	3	243	Saleswomen, Shopkeepers, &c.
35	10	3	16	6	9	3	—	551	Clerks, Cashiers, Civil Servants, &c.
22	12	30	17	3	46	9	2	852	Teachers, Assistant Teachers, Pupil Teachers
4	—	—	4	—	—	—	—	78	Students (University, Medical)
—	—	42	12	2	25	33	47	312	Occupations not included in above Classes
23	17	7	3	—	—	—	4	117	Girls still left School or College
6	25	30	11	49	—	6	10	359	Girls still in attendance at School or College
32	88	—	22	23	—	—	2	1,706	No occupation stated.
190	287	234	123	110	122	54	73	5,736	Total Number of Young Women.
298	309	305	236	143	217	105	92	10,709	Total Number of Students.

TABLE V.—continued.

COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION.  
LEINSTER.

	Carlow.	Dublin.	Kildare.	Kilkenny.	King's County.	Lonsford.	Leath.	Meath.	Queen's Co.	Westmeath.	Wexford.	Wicklow.	Total for Leinster.
Number of individual students enrolled.	996	23	176	253	234	28	336	204	129	109	—	197	1,990
Number enrolled in:—													
Preparatory Classes.	54	—	14	49	77	—	87	16	28	18	—	48	371
Commercial Classes (including Languages Classes).	20	—	33	33	90	—	77	33	36	38	—	24	369
Science (Pure and Applied) and Mathematical Classes.	80	—	7	9	53	—	51	14	7	11	—	24	256
Handicraft Classes.	—	—	18	35	26	—	9	14	22	22	—	14	160
Domestic Science Classes.	142	—	87	104	88	—	74	66	48	12	—	62	683
Art Classes.	—	—	12	33	—	—	80	—	—	—	—	25	130
Classes in Lace and Crochet Making, Embroidery, Sprigging, Drawn-Thread Work, &c.	—	28	—	—	—	28	—	75	—	18	—	—	149
Other Classes.	—	—	—	—	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.													
Young Men.													
Persons engaged in Farming Occupations.	6	—	6	—	9	—	1	3	4	—	—	4	30
Building Trades, including Workers in Wood, &c.	26	—	4	8	14	—	10	5	4	7	—	11	89
Coach and Car Builders.	6	—	—	—	2	—	1	—	—	2	—	—	11
Engineers, Workers in Metal, Dringhtsmen, &c.	—	—	—	7	1	—	31	—	4	1	—	1	45
Architects, Surveyors, Civil Engineers, &c.	—	—	2	—	3	—	5	—	—	1	—	—	11
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	3	—	—	1	—	—	—	—	—	4
Printing Trades—Compositors, Lithographers, &c.	5	—	—	—	—	—	3	—	—	—	—	—	8
Textile Industries—Designers, Weavers, &c.	—	—	—	14	—	—	—	—	—	—	—	—	14
Painters, Decorators, &c.	—	—	1	7	1	—	—	—	—	—	—	3	11
Plumbers, Gasfitters, &c.	—	—	—	4	—	—	—	—	—	—	—	5	9
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	1	1	—	—	5	—	—	—	—	—	7
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—	—	1	—	—	—	5	6
Salesmen, Shopkeepers, Warehousemen, &c.	—	—	6	3	19	—	18	10	4	26	—	1	87
Clerks in Commercial Offices.	23	—	4	3	27	—	16	8	1	2	—	4	82
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	—	—	7	—	—	—	16	1	2	—	—	6	32
Teachers, Assistant Teachers, Pupil Teachers, &c.	—	—	1	18	—	—	18	1	5	1	—	2	46
Students (University, Law, Medical).	—	—	—	—	—	—	6	—	—	—	—	—	6
Occupations not included in the above Classes.	24	—	1	2	14	—	8	3	10	—	—	6	63
Boys just left School or College.	49	—	—	1	—	—	8	9	—	—	—	—	59
Boys still in attendance at School or College.	16	—	7	14	21	—	5	14	13	—	—	31	109
No occupation stated.	8	—	3	1	4	—	5	14	15	29	—	9	89
Total Number of Young Men.	154	—	43	86	115	—	107	55	61	69	—	87	827
Young Women.													
Persons engaged in Farming Occupations.	7	—	4	9	—	16	—	4	8	—	—	—	48
Domestic Servants.	52	—	20	5	13	7	15	3	4	—	—	4	128
Printing Trades.	5	—	—	—	—	—	—	—	—	—	—	—	5
Dressmakers, Milliners, &c.	—	—	6	2	7	—	5	5	—	—	—	3	28
Textile Industries—Designers, Weavers, &c.	—	—	21	—	—	—	—	—	—	—	—	—	21
Factory Workers not included in above.	53	—	—	—	—	—	—	1	—	—	—	—	53
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn-Thread Work, &c.	—	28	—	—	—	5	—	97	—	31	—	—	161
Saleswomen, Shopkeepers, &c.	4	—	7	9	10	—	18	4	12	—	—	4	64
Clerks, Cashiers, Civil Servants, &c.	4	—	5	1	2	—	9	2	—	3	—	1	28
Teachers, Assistant Teachers, Pupil Teachers.	—	—	0	15	7	—	36	—	6	—	—	9	59
Students (University, Medical).	—	—	—	31	40	—	18	3	19	2	—	1	114
Occupations not included in above Classes.	9	—	4	—	—	—	10	—	12	—	—	—	29
Girls just left School or College.	5	—	24	52	27	—	34	14	15	—	—	44	219
Girls still in attendance at School or College.	6	—	36	43	13	—	15	16	1	—	—	44	174
No occupation stated.	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Number of Young Women.	142	28	133	167	119	23	179	149	68	40	—	110	1,163
Total Number of Students.	296	28	176	263	234	28	336	204	129	109	—	197	1,990



TABLE V.—continued.

## COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.

## MUNSTER.

	Clare.	Cork.	Kerry.	Limerick.	Tipperary (N. Riding)	Tipperary (S. Riding)	Tipperary (Jr. Urban and Rural).	Waterford.	Totals for Munster.
Number of individual students enrolled.	193	1,375	431	94	243	144	190	107	2,777
Number enrolled in:—									
Preparatory Course Classes.	—	10	—	—	57	—	39	11	117
Commercial Classes (including Languages Classes).	77	432	—	—	—	—	59	—	618
Science (Pure and Applied) and Mathematics Classes.	—	247	—	—	51	44	6	—	348
Handicraft Classes.	—	432	83	—	31	46	17	57	666
Domestic Science Classes.	116	76	358	18	18	53	69	4	617
Art Classes.	—	269	51	—	—	26	—	36	322
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn-Thread Work, &c.	—	51	42	74	103	40	—	19	331
Other Classes.	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.									
Young Men.									
Persons engaged in Farming Occupations.	—	96	—	—	25	—	—	—	123
Building Trades, including Workers in Wood, &c.	—	129	27	—	11	4	—	8	179
Coach and Car Builders.	—	6	—	—	1	4	—	—	11
Engineers, Workers in Metal, Draughtsmen, &c.	—	80	—	—	—	1	—	—	81
Architects, Surveyors, Civil Engineers, &c.	—	1	—	—	—	—	—	—	1
Electrical Engineers, Scientific Instrument Makers, &c.	—	4	—	—	—	—	—	—	4
Printing Trades—Compositors, Lithographers, &c.	—	2	—	—	—	—	—	1	3
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—
Painters, Decorators, &c.	—	18	—	—	1	3	—	—	22
Plumbers, Gasfitters, &c.	—	3	3	—	1	—	—	3	9
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c.	—	5	—	—	—	1	—	—	6
Salesmen, Shopkeepers, Warehousemen, &c.	10	92	9	—	12	3	8	4	137
Clerks in Commercial Offices.	17	28	1	—	3	5	12	1	64
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	—	18	—	—	3	—	—	1	22
Teachers, Assistant Teachers, Pupil Teachers, &c.	2	49	14	—	20	2	3	5	95
Students (University, Law, Medicine).	—	11	—	—	—	—	—	—	11
Occupations not included in the above Classes.	6	41	25	—	26	6	20	11	135
Boys just left School or College.	5	29	4	—	8	—	—	5	48
Boys still in attendance at School or College.	4	395	70	—	13	15	22	8	536
No occupation stated.	—	19	14	—	—	3	13	—	49
Total Number of Young Men.	43	976	176	—	123	46	78	49	1,490
Young Women.									
Persons engaged in Farming Occupations.	32	—	8	15	—	—	—	—	55
Domestic Servants.	12	1	20	1	—	—	1	1	35
Printing Trades.	—	—	—	—	—	—	—	—	—
Dressmakers, Milliners, &c.	3	6	5	38	—	—	—	5	57
Textile Industries—Designers, Weavers, &c.	—	1	—	—	—	—	—	—	1
Factory Workers not included in above.	—	—	—	1	—	—	—	—	1
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	3	51	42	—	103	—	—	—	199
Saleswomen, Shopkeepers, &c.	18	25	32	3	—	—	8	1	87
Clerks, Cashiers, Civil Servants, &c.	—	3	—	—	—	—	—	—	3
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medicine).	6	62	7	—	18	—	6	14	113
Occupations not included in above Classes.	20	6	8	58	—	—	11	5	86
Girls just left School or College.	16	14	7	—	—	—	31	5	49
Girls still in attendance at School or College.	14	184	51	—	—	13	31	15	307
No occupation stated.	26	46	75	—	—	86	53	16	304
Total Number of Young Women.	150	599	255	94	131	98	112	58	1,287
Total Number of Students.	193	1,375	431	94	243	144	190	107	2,777

TABLE V.—continued

COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.  
ULSTER.

	Antrim.	Armagh.	Cavan.	Down.	Down.	Fermanagh.	Londonderry.	Monaghan.	Tyrone.	Totals for Ulster.
Number of individual students enrolled.	493	—	242	538	—	460	451	282	426	2,897
Number enrolled in:—										
Preparatory Course Classes.	77	—	—	—	—	28	68	—	75	248
Commercial Classes (including Languages Classes).	149	—	—	—	—	51	74	149	147	570
Science (Pure and Applied) and Mathematics Classes.	102	—	—	—	—	9	30	3	67	216
Handicraft Classes.	51	—	—	—	—	—	50	—	36	137
Domestic Science Classes.	218	—	—	—	—	66	110	—	155	549
Art Classes.	9	—	—	—	—	21	55	—	44	132
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn-Thread Work, &c.	—	—	242	538	—	343	111	125	—	1,359
Other Classes.	—	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.										
Young Men.										
Persons engaged in Farming Occupations.	31	—	—	—	—	1	57	5	23	117
Building Trades, including Workers in Wood, &c.	20	—	—	—	—	3	4	6	11	44
Cash and Car Builders.	1	—	—	—	—	—	—	—	1	2
Engineers, Workers in Metal, Draughtsmen, &c.	28	—	—	—	—	3	1	2	5	39
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	1	—	2	3
Electrical Engineers, Scientific Instrument Makers, &c.	1	—	—	—	—	1	—	—	1	3
Printing Trades—Compositors, Lithographers, &c.	1	—	—	—	—	1	1	—	6	9
Textile Industries—Designers, Weavers, &c.	37	—	—	—	—	—	—	—	6	43
Painters, Decorators, &c.	—	—	—	—	—	1	2	—	—	3
Plumbers, Gasfitters, &c.	—	—	—	—	—	3	1	—	2	6
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—	1	—	—	1
Chemists, Analysts, Druggists, &c.	2	—	—	—	—	—	—	—	2	4
Salesmen, Shopkeepers, Warehousemen, &c.	29	—	—	—	—	26	28	13	37	133
Clerks in Commercial Offices.	23	—	—	—	—	2	1	7	20	53
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	7	—	—	—	—	4	6	4	18	35
Teachers, Assistant Teachers, Pupil Teachers, &c.	3	—	—	—	—	—	4	1	8	16
Students (University, Law, Medical).	—	—	—	—	—	—	4	—	1	5
Occupations not included in the above Classes.	13	—	—	—	—	—	9	15	—	42
Boys just left School or College.	9	—	—	—	—	—	3	3	25	40
Boys still in attendance at School or College.	5	—	—	—	—	1	24	14	5	49
No occupation stated.	6	—	—	—	—	2	14	7	—	29
Total Number of Young Men.	226	—	—	—	—	48	160	77	173	684
Young Women.										
Persons engaged in Farming Occupations.	25	—	—	—	—	—	31	80	29	215
Domestic Servants.	22	—	—	—	—	17	11	—	40	90
Printing Trades.	4	—	—	—	—	—	—	—	1	5
Dressmakers, Milliners, &c.	12	—	—	—	—	—	13	2	12	39
Textile Industries—Designers, Weavers, &c.	4	—	—	—	—	—	—	—	—	4
Factory Workers not included in above.	4	—	—	—	—	—	—	—	7	11
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	—	—	242	418	—	343	18	3	—	1,024
Saleswomen, Shopkeepers, &c.	10	—	—	—	—	1	4	31	41	87
Clerks, Cashiers, Civil Servants, &c.	11	—	—	—	—	4	2	16	21	54
Teachers, Assistant Teachers, Pupil Teachers, &c.	16	—	—	—	—	16	30	1	23	86
Students (University, Medical).	1	—	—	—	—	—	1	—	—	2
Occupations not included in above Classes.	11	—	—	—	—	17	41	26	47	142
Girls just left School or College.	15	—	—	—	—	—	2	7	23	47
Girls still in attendance at School or College.	2	—	—	120	—	1	62	19	9	213
No occupation stated.	135	—	—	—	—	13	26	20	—	194
Total Number of Young Women.	272	—	242	538	—	412	291	205	253	2,313
Total Number of Students.	493	—	242	538	—	460	451	282	426	2,897

TABLE V.—*continued.*COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—*continued.*  
CONNAUGHT.

	Galway.	Lethrim.	Mayo.	Roscommon.	Sligo.	Totals for Connaught.
Number of individual students enrolled,	217	62	495	53	—	827
Number enrolled in:—						
Preparatory Course Classes,	18	—	—	—	—	18
Commercial Classes (including Language Classes),	32	—	161	—	—	193
Science (Pure and Applied) and Mathematics Classes,	11	—	—	—	—	11
Handicraft Classes,	59	—	74	—	—	133
Domestic Science Classes,	56	—	200	—	—	256
Art Classes,	—	—	—	—	—	—
Classes in Lace and Crochet Making, Embroidery, Springing, Drawn Thread Work, &c.	41	62	194	53	—	350
Other Classes,	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.						
Young Men.						
Persons engaged in Farming Occupations,	6	—	14	—	—	20
Building Trades, including Workers in Wood, &c.	12	—	5	—	—	17
Coach and Car Builders,	—	—	—	—	—	—
Engineers, Workers in Metal, Draughtsmen, &c.	2	—	—	—	—	2
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	2	—	—	—	—	2
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—
Painters, Decorators, &c.	2	—	—	—	—	2
Plumbers, Gasfitters, &c.	—	—	1	—	—	1
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	2	—	—	—	—	2
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.	11	—	34	—	—	45
Clerks in Commercial Offices,	5	—	4	—	—	9
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices,	1	—	—	—	—	1
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical),	6	—	1	—	—	7
Occupations not included in the above Classes,	9	—	1	—	—	10
Boys just left School or College,	—	—	—	—	—	—
Boys still in attendance at School or College,	—	—	43	—	—	43
No occupation stated,	—	—	32	—	—	32
Total Number of Young Men,	58	—	135	—	—	193
Young Women.						
Persons engaged in Farming Occupations,	—	35	14	—	—	49
Domestic Servants,	16	—	9	—	—	25
Printing Trades,	5	—	—	—	—	5
Dressmakers, Milliners, &c.	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—
Factory Workers not included in above,	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, Springing, Drawn Thread Work, &c.	—	—	195	—	—	195
Saleswomen, Shopkeepers, &c.	3	—	8	—	—	11
Clerks, Cashiers, Civil Servants, &c.	6	—	6	—	—	12
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical),	4	—	2	—	—	6
Occupations not included in above Classes,	—	—	—	—	—	—
Girls just left School or College,	—	—	90	—	—	90
Girls still in attendance at School or College,	10	27	36	—	—	73
No occupation stated,	115	—	—	53	—	168
Total Number of Young Women,	159	62	360	53	—	634
Total Number of Students,	217	62	495	53	—	827

TABLE V.—continued,  
COUNTY SCHEMES—ITINERANT INSTRUCTION,  
LEINSTER.

OCCUPATIONS OF STUDENTS.	Carlow.	Dublin.	Kildare.	Kilkenny.	King's Co.	Longford.	Louth.	Meath.	Queen's Co.	Westmeath.	Wexford.	Wicklow.	Totals for Leinster.
<b>Young Men.</b>													
Persons engaged in Farming Occupations, including Trades, including Workers in Wood, &c.	34	—	46	81	108	46	34	64	31	40	77	13	594
Coach and Car Builders, Enamellers, Workers in Metal, Draughts &c.	—	—	3	2	1	—	1	1	1	1	—	—	11
Architects, Surveyors, Civil Engineers, &c., Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	1	—	1	—	—	—	—	2
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c., Painters, Decorators, &c., Plumbers, Gasfitters, &c., Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	2	—	—	—	—	—	—	1	—	3
Chemists, Analysts, Druggists, &c.	—	—	1	—	—	—	—	—	—	—	—	1	2
Salesmen, Shopkeepers, Warehousemen, &c., Clerks in Commercial Offices, Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	9	—	2	3	9	4	—	10	13	1	—	1	56
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical), Occupations not included in above Classes, Boys just left School or College, Boys still in attendance at School or College, No occupation stated.	—	—	2	1	2	1	—	3	4	—	—	1	15
	—	—	—	—	—	—	—	—	—	—	—	—	3
	—	—	1	3	12	6	3	13	3	2	2	1	46
	3	—	2	8	21	—	3	15	15	5	8	24	101
	—	—	11	—	—	—	—	—	—	—	—	—	16
	37	—	22	104	86	60	12	67	25	44	27	29	513
	8	—	3	1	—	5	—	4	1	—	—	—	22
<b>Total Number of Young Men,</b>	<b>129</b>	<b>—</b>	<b>89</b>	<b>221</b>	<b>456</b>	<b>132</b>	<b>55</b>	<b>197</b>	<b>101</b>	<b>101</b>	<b>117</b>	<b>94</b>	<b>1,492</b>
<b>Young Women.</b>													
Persons engaged in Farming Occupations, Domestic Servants, Printing Trades, Dressmakers, Milliners, &c., Textile Industries—Designers, Weavers, &c., Factory Workers not included in above, Workers in Lace, Crochet, Embroidery, Springing, Drawn Thread Work, &c., Saleswomen, Shopkeepers, &c., Clerks, Cashiers, Civil Servants, &c., Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), Occupations not included in above Classes, Girls just left School or College, Girls still in attendance at School or College, No occupation stated.	196	151	33	99	49	37	12	111	18	—	160	18	884
	124	25	17	43	9	5	4	15	13	—	21	11	287
	48	—	1	3	7	2	—	12	—	—	3	—	71
	—	96	—	—	—	—	—	—	—	—	—	—	96
	—	22	—	—	—	—	—	34	—	—	—	—	56
	—	13	—	20	13	—	—	22	13	—	7	9	97
	13	2	—	—	—	—	—	19	2	—	6	—	38
	22	5	3	10	4	4	5	12	7	—	11	9	92
	—	—	—	—	—	—	—	—	—	—	—	—	2
	13	35	13	197	—	—	41	37	13	—	29	14	332
	—	28	—	1	—	3	2	—	28	—	—	—	62
	53	—	13	41	18	30	15	47	—	—	21	21	299
	—	2	16	19	—	—	1	19	25	—	—	53	125
<b>Total Number of Young Women,</b>	<b>458</b>	<b>377</b>	<b>98</b>	<b>363</b>	<b>100</b>	<b>51</b>	<b>80</b>	<b>330</b>	<b>119</b>	<b>—</b>	<b>294</b>	<b>136</b>	<b>2,434</b>
<b>Total Number of Students,</b>	<b>587</b>	<b>377</b>	<b>187</b>	<b>584</b>	<b>356</b>	<b>213</b>	<b>135</b>	<b>527</b>	<b>220</b>	<b>101</b>	<b>411</b>	<b>230</b>	<b>3,926</b>

TABLE V.—continued.  
COUNTY SCHEMES—ITINERANT INSTRUCTION.—continued.  
MUNSTER.

OCCUPATIONS OF STUDENTS.	Clare.	Cork.	Kerry.	Limerick.	Tipperary (N.E.L.)	Tipperary (S.E.R.)	Tipperary (St. Urban and Rural.)	Waterford.	Totals for Munster.
<b>Young Men.</b>									
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	36	47	60	—	30	4	22	70	269
Coach and Car Builders, Engineers, Workers in Metal, Draughtsmen, &c.	—	6	—	—	—	—	—	4	10
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	1	8	—	—	—	—	—	2	9
Painters, Decorators, &c.	—	—	—	—	—	—	—	—	—
Plumbers, Gasfitters, &c.	—	—	—	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c.	—	7	12	—	—	1	2	6	33
Salesmen, Shopkeepers, Warehousemen, &c.	—	5	—	—	—	—	—	1	8
Clerks in Commercial Offices, Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	—	1	2	—	—	—	—	—	3
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical).	2	10	4	—	1	1	—	6	24
Occupations not included in above Classes.	4	16	13	—	—	—	7	22	62
Boys just left School or College.	14	—	—	—	—	—	—	7	21
Boys still in attendance at School or College.	43	124	108	—	9	11	—	114	409
No occupation stated.	—	—	65	—	—	2	—	4	71
<b>Total Number of Young Men.</b>	<b>98</b>	<b>251</b>	<b>273</b>	<b>—</b>	<b>30</b>	<b>22</b>	<b>31</b>	<b>264</b>	<b>859</b>
<b>Young Women.</b>									
Persons engaged in Farming Occupations, Domestic Servants, &c.	145	378	454	265	174	278	27	33	1,754
Printing Trades.	26	45	59	20	20	65	—	23	255
Dressmakers, Milliners, &c.	—	4	—	—	—	—	—	—	4
Textile Industries—Designers, Weavers, &c.	3	2	7	5	—	16	—	—	33
Factory Workers not included in above.	—	9	2	—	—	1	—	—	12
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	—	34	—	1	—	—	—	—	37
Saleswomen, Shopkeepers, &c.	16	85	56	46	11	37	1	11	293
Clerks, Cashiers, Civil Servants, &c.	1	3	5	—	—	3	—	—	12
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	24	26	26	24	9	23	5	—	137
Occupations not included in above Classes.	—	5	4	—	—	—	—	—	10
Girls just left School or College.	75	91	74	28	16	1	2	—	287
Girls still in attendance at School or College.	5	4	20	22	—	13	—	—	94
No occupation stated.	81	37	73	116	—	28	26	57	345
	19	85	112	56	8	3	32	13	327
<b>Total Number of Young Women.</b>	<b>395</b>	<b>806</b>	<b>892</b>	<b>672</b>	<b>238</b>	<b>535</b>	<b>93</b>	<b>138</b>	<b>3,771</b>
<b>Total Number of Students.</b>	<b>493</b>	<b>1,050</b>	<b>1,165</b>	<b>672</b>	<b>268</b>	<b>567</b>	<b>124</b>	<b>392</b>	<b>4,730</b>

TABLE V.—continued.  
COUNTY SCHEMES—ITINERANT INSTRUCTION—continued.

## ULSTER.

OCCUPATION OF STUDENTS.	Antrim.	Armagh.	Cavan.	Donegal.	Down.	Fermanagh.	Londonderry.	Monaghan.	Tyrone.	Totals for Ulster.
<i>Young Men.</i>										
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	16	67	157	32	78	64	18	192	16	654
Coach and Car Builders, Engineers, Workers in Metal, Draughtsmen, &c.	2	—	4	—	—	4	—	1	4	2
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	—	—	—	4	—	—	—	4	10
Painters, Decorators, &c.	—	—	—	—	—	—	—	—	—	—
Plumbers, Gasfitters, &c.	—	—	—	—	—	11	—	—	—	11
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c.	—	—	—	—	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c.	1	1	1	11	1	—	1	2	10	28
Clerks in Commercial Offices, Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	—	1	1	4	—	3	—	—	2	7
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical).	—	1	4	2	2	5	1	2	3	21
Occupations not included in above Classes.	2	1	8	—	—	14	6	4	—	41
Boys just left School or College.	7	3	35	—	2	—	—	10	1	47
Boys still in attendance at School or College.	—	45	59	62	74	85	32	59	10	466
No occupation stated.	—	—	3	—	4	1	3	—	—	16
Total Number of Young Men,	2	119	271	121	183	178	63	272	—	1,266
<i>Young Women.</i>										
Persons engaged in Farming Occupations, Domestic Servants, &c.	29	—	157	40	218	295	112	100	33	1,552
Printing Trades.	20	7	5	18	37	50	15	8	12	142
Dressmakers, Milliners, &c.	—	2	—	—	—	—	—	—	—	2
Textile Industries—Designers, Weavers, &c.	13	5	1	4	16	—	9	3	1	52
Factory Workers not included in above.	2	1	—	—	86	—	—	—	—	95
Workers in Lace, Crochet, Embroidery, Springing, Drawn-Thread Work, &c.	1	—	—	26	—	—	—	8	2	103
Saleswomen, Shopkeepers, &c.	21	4	11	36	50	—	1	11	10	164
Clerks, Cashiers, Civil Servants, &c.	4	3	—	4	2	—	—	4	1	18
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical).	20	9	7	22	28	3	12	6	14	121
Occupations not included in above Classes.	62	5	8	7	34	14	48	17	16	211
Girls just left School or College.	18	—	1	34	—	—	—	3	2	68
Girls still in attendance at School or College.	7	56	27	37	90	—	8	12	14	181
No occupation stated.	21	122	30	62	44	—	—	19	—	288
Total Number of Young Women,	230	221	237	382	533	312	205	189	106	2,435
Total Number of Students,	312	340	508	503	696	505	268	461	158	3,751

TABLE V.—continued

## COUNTY SCHEMES—ITINERANT INSTRUCTION—continued.

## CONNAUGHT.

OCCUPATIONS OF STUDENTS.	Galway.	Lodish.	Mayo.	Roscommon.	Sligo.	Total for Connaught.
<i>Young Men.</i>						
Persons engaged in Farming Occupations, . . .	92	157	101	118	125	593
Building Trades, including Workers in Wood, &c. . .	4	—	1	4	—	9
Coch and Car Builders, . . .	—	—	—	—	—	—
Engineers, Workers in Metal, Draughtsmen, &c. . .	—	—	—	—	—	—
Architects, Surveyors, Civil Engineers, &c. . .	—	—	—	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c. . .	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers &c. . .	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c. . .	—	—	—	—	—	—
Painters, Decorators, &c. . .	—	—	—	—	—	—
Humbers, Gasfitters, &c. . .	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c. . .	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c. . .	—	—	—	—	—	—
Salesmen, Shopkeepers, Warehousemen, &c. . .	4	—	3	—	—	7
Clerks in Commercial Offices, . . .	—	—	—	—	—	—
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices, . . .	—	—	—	—	—	—
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Law, Medical), . . .	8	—	3	1	—	12
Occupations not included in above Classes, . . .	9	—	—	37	—	46
Boys just left School or College, . . .	5	—	—	5	—	10
Boys still in attendance at School or College, . . .	65	—	33	—	7	105
No occupation stated, . . .	35	—	3	—	—	38
<b>Total Number of Young Men,</b> . . .	<b>222</b>	<b>157</b>	<b>144</b>	<b>163</b>	<b>138</b>	<b>824</b>
<i>Young Women.</i>						
Persons engaged in Farming Occupations, . . .	679	67	188	156	144	1,234
Domestic Servants, . . .	13	—	4	11	5	33
Building Trades, . . .	—	—	—	—	—	—
Dressmakers, Milliners, &c. . .	8	—	2	2	—	12
Textile Industries—Designers, Weavers, &c. . .	—	—	—	—	—	—
Factory Workers not included in above, . . .	—	—	—	—	—	—
Workers in Lace, Crochet, Embroidery, Springing, Drawn Thread Work, &c. . .	—	—	7	—	—	7
Saleswomen, Shopkeepers, &c. . .	46	10	8	8	—	72
Clerks, Cashiers, Civil Servants, &c. . .	4	—	—	—	—	4
Teachers, Assistant Teachers, Pupil Teachers, Students (University, Medical), . . .	54	—	8	18	—	80
Occupations not included in above Classes, . . .	14	—	20	27	—	61
Girls just left School or College, . . .	4	—	—	1	12	17
Girls still in attendance at School or College, . . .	106	—	23	133	4	266
No occupation stated, . . .	30	—	—	14	—	44
<b>Total Number of Young Women,</b> . . .	<b>958</b>	<b>77</b>	<b>268</b>	<b>370</b>	<b>165</b>	<b>1,828</b>
<b>Total Number of Students,</b> . . .	<b>1,180</b>	<b>234</b>	<b>402</b>	<b>533</b>	<b>303</b>	<b>2,652</b>

TABLE V.—continued.

## SUMMARY.

## URBAN SCHOLARS.

OCCUPATIONS OF STUDENTS.	URBAN SCHOLARS.				
	Latimer.	Munster.	Ulster.	Connaught.	Totals.
<i>Young Men.</i>					
Persons engaged in Farming Occupations.	36	113	57	3	98
Building Trades, including Workers in Wood, &c.	149	313	369	38	769
Coach and Car Builders.	9	28	10	5	50
Engineers, Workers in Metal, Draughtsmen, &c.	349	189	823	5	1,366
Architects, Surveyors, Civil Engineers, &c.	31	43	64	—	138
Electrical Engineers, Scientific Instrument Makers, &c.	90	72	91	2	255
Printing Trades—Compositors, Lithographers, &c.	67	45	81	12	205
Textile Industries—Designers, Weavers, &c.	35	17	581	14	588
Painters, Decorators, &c.	44	41	85	21	191
Plumbers, Gasfitters, &c.	41	45	60	4	150
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	39	45	54	16	135
Chemists, Analysts, Druggists, &c.	47	43	123	8	220
Salesmen, Shopkeepers, Warehousemen, &c.	174	133	540	35	881
Clerks in Commercial Offices.	435	310	772	23	1,470
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	300	83	180	2	465
Teachers, Assistant Teachers, Pupil Teachers.	58	89	277	56	480
Students (University, Law, Medical).	69	33	40	8	149
Occupations not included in above Classes.	418	92	434	6	950
Boys just left School or College.	76	81	41	—	198
Boys still in attendance at School or College.	110	71	165	31	357
No occupation stated.	156	124	198	22	500
(Total Young Men).	2,593	1,720	4,973	310	9,607
<i>Young Women.</i>					
Persons engaged in Farming Occupations.	27	19	34	—	80
Domestic Servants.	182	87	314	26	613
Printing Trades.	8	1	12	—	21
Dressmakers, Milliners, &c.	76	77	293	23	469
Textile Industries—Designers, Weavers, &c.	31	—	327	16	374
Factory Workers not included in above.	42	3	501	3	549
Workers in Lace, Crochet, Embroidery, Springing, Drawn Thread Work, &c.	4	270	38	—	312
Saleswomen, Shopkeepers, &c.	115	126	242	22	505
Clerks, Cashiers, Civil Servants, &c.	258	105	551	14	828
Teachers, Assistant Teachers, Pupil Teachers.	243	139	852	76	1,310
Students (University, Medical).	13	7	78	—	97
Occupations not included in above Classes.	30	96	312	64	502
Girls just left School or College.	151	154	117	—	422
Girls still in attendance at School or College.	137	123	359	56	725
No occupation stated.	821	516	1,706	88	3,141
Totals (Young Women).	3,251	1,775	5,735	358	10,150
Totals (Young Men and Young Women).	4,844	3,501	10,708	668	19,757



TABLE V.—continued.

## SUMMARY.

COUNTY SCHEMES. Permanent centres of Instruction.					COUNTY SCHEMES. Itinerant Instruction.					OCCUPATIONS OF STUDENTS.
Leinster.	Munster.	Ulster.	Connaught.	Totals.	Leinster.	Munster.	Ulster.	Connaught.	Totals.	
Young Men.										
33	123	117	24	298	594	359	634	593	2,080	Persons engaged in Farming Occupations.
89	179	44	17	329	86	46	20	9	161	Building Trades, including Workers in Wood, &c.
11	11	2	2	26	3	—	2	—	5	Couch and Car Builders.
45	31	20	—	115	11	10	15	—	36	Engineers, Workers in Metal, Draughts- men, &c.
11	1	3	—	15	2	—	—	—	2	Architects, Surveyors, Civil Engineers, &c.,
4	4	3	—	11	—	—	—	—	—	Electrical Engineers, Scientific Instrument Makers, &c.
8	3	0	2	22	—	—	—	—	—	Printing Trades—Compositors, Lithographers &c.
14	—	43	—	57	5	9	10	—	22	Textile Industries—Designers, Weavers, &c.
31	17	3	2	53	—	2	2	—	6	Painters, Decorators, &c.
9	7	0	1	23	8	—	11	—	19	Plumbers, Gasfitters, &c.
7	9	1	2	19	6	—	—	—	6	Trades Involving Applied Art—Jewellers, Furniture Makers, &c.
6	6	4	—	16	2	—	—	—	2	Chemists, Analysts, Druggists, &c.
87	137	133	45	402	56	33	23	7	124	Salesmen, Shopkeepers, Warehousemen, &c.
88	66	58	9	221	15	8	7	—	36	Clerks in Commercial Offices.
32	22	38	1	93	3	3	6	—	12	Clerks in Banks, Civil Service, Law, As- surance, and Accountants' Offices.
46	95	16	7	164	66	34	21	12	103	Teachers, Assistant Teachers, Pupil Teachers.
6	11	5	—	22	3	2	—	—	42	Students (University, Law, Medical)
63	135	42	10	250	101	62	41	12	216	Occupations not included in above Classes.
55	68	40	—	143	16	21	47	—	96	Boys just left School or College.
199	326	49	45	737	513	409	406	104	1,432	Boys still in attendance at School or College.
38	49	39	32	198	22	71	16	38	147	No occupation stated.
327	1,690	684	193	3,194	1,492	959	1,266	824	4,541	Totals (Young Men).
Young Women.										
48	53	215	49	365	884	1,764	1,053	1,232	4,922	Persons engaged in Farming Occupations,
123	36	90	25	274	287	356	142	33	718	Domestic Servants,
5	—	5	—	10	—	4	2	—	6	Printing Trades,
28	87	39	5	129	71	33	32	12	168	Dressmakers, Milliners, &c.,
21	1	4	—	26	94	—	95	—	191	Textile Industries—Designers, Weavers, &c.
53	1	11	—	65	—	12	23	—	35	Factory Workers not included in above.
161	199	1,024	195	1,579	56	37	165	7	265	Workers in Lace, Crochet, Embroidery, Spergling, Drawn Thread Work, &c.
66	87	37	11	201	97	263	144	72	576	Saleswomen, Shopkeepers, &c.,
23	3	54	12	97	33	12	13	4	67	Clerks, Cashiers, Civil Servants, &c.,
98	112	36	6	308	92	137	151	80	430	Teachers, Assistant Teachers, Pupil Teachers.
5	—	2	—	7	2	10	1	—	13	Students (University, Medical).
114	86	142	90	432	332	287	211	61	891	Occupations not included in above Classes.
29	40	47	—	116	62	94	50	17	223	Girls just left School or College.
210	307	213	73	803	299	545	181	206	1,291	Girls still in attendance at School, or College
775	594	194	168	1,631	125	327	288	44	784	No occupation stated.
1,163	1,987	3,213	634	5,997	3,436	3,771	3,485	1,828	10,520	Totals (Young Women).
3,360	3,777	3,897	827	8,861	3,928	4,786	3,761	3,652	15,061	Totals (Young Men and Young Women).

TABLE VI.  
LOCAL SCIENCE AND ART EXAMINATIONS (IRELAND),  
1911.

LIST OF EXAMINATION CENTRES, showing the subjects in which  
examinations were held at each Centre.

(NOTE.—A.D.=Architectural Design; A.M.=Drawing the Antique from Memory; Anat.=Anatomy; Arch.=Architecture; C.O.=Drawing of Common Objects from Memory; D.=Design; D.A.=Drawing the Antique; F.=Freehand Drawing in Outline; G.D.=Geometrical Drawing (Art); H.O.=Historic Ornament; L.=Drawing in Light and Shade from a Cast; M.=Model Drawing; M.A.=Modelling from the Antique; M.D.=Modelling Design; M.H.=Modelling the Head from Life; M.L.=Modelling from Life; P.=Perspective; P.F.=Memory Drawing of Plant Form; Princ. O.=Principles of Ornament; Ptg. O.=Painting Ornament; S.L.=Painting from Still Life; Science Subjects are designated by the numbers given them in "Syllabuses and Lists of Apparatus" of the Board of Education).

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
LEINSTER.			
6247	Co. CARLOW: Bagenalstown: Presentation Convent.	Subject XIV.	G.-D., S.L., F., and M.
6260	Carlow: Convent of Mercy.	—	G.-D., F., L., and M.
6356	Tullow: Bridiane Convent.	—	L.
6107	Tullow: St. Patrick's Seminary.	—	G.-D., F., L., M., and D.
Co. DUBLIN:			
6511	Ballsbridge: Technical School.	—	F.
6269	Blackrock: Dominican Convent, Stoa Hill.	—	G.-D., F., L., and M.
6262	Chapelized: Mount Sackville Convent.	Subjects XIV. and XXV.	—
6096	Rathfarnham: Loreto Abbey.	—	F., and M.
6041	Ringsend: Pembroke Technical School.	Subjects II., Vp., VIA., VII., XXII., and XXVI.	—
Co. DUBLIN OF DUBLIN:			
6143	Dublin: Christian Brothers' Novitiate, Marino.	—	G.-D., F., L., M., and D.
6010	Dublin: City of Dublin Technical Schools.	Subjects I., II., III., V. (Div. I.), V. (Div. II.), Vp., VIA., VII., VIIA., VIIIA., VIIIC., VIII.A., VIIIA., VIIIC., IX., X., Xp., XI., XIc., XII., XXIII., XXV., and XXVI.	G.-D., P., F., C.O., L., M., and D.
6019	Dublin: Metropolitan School of Art.	Subjects I. and V. (Div. I.)	G.-D., P., Princ. O., S.L., A.M., F., C.O., L., M., D.L., D.A., Anat., P., H.O., Ptg. O., Arch., P.F., M.A., M.H., M.D. (Stage I), M.L., and M.D. (Hons.)
6035	Dublin: Royal College of Science.	Subjects I., II., III., IV., V. (Div. I.), V. (Div. II.), Vp., VIA., VII., VIIA., VIIIA., VIIIC., IX., X., Xp., XI., XIc., XIV., XVI., XX., XXII., and XXIV.	—
6807	Co. KILKENNY: Kilkenny: City Technical School.	Subjects II. and III.	G.-D., F., C.O., L., M., D., Ptg. O., and P.-F.



## EXAMINATION CENTRES—continued.

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
6057	Co. DUBLIN OF CORK—con. Cork: St. Aloysius' School, St.	—	M.
6024	Cork: St. Vincent's Convent School.	Subject V. (Div. I.)	G.-D., F., L., M., and D.
6714	Co. KERRY: Dingle: Technical School.	—	F., G.-D., F., and M.
6680	Killarney: Technical School.	Subject I.	G.-D., F., and M.
6073	Lisdowney: Technical School.	Subject III.	G.-D., F., and M.
6571	Trillick: Central Technical School.	Subjects I., II., III., Vp., VIIA., and XXV.	G.-D., F., L., M., and D.
6160	Co. BOROUGH OF LIMERICK: Limerick: Christian Brothers' Schools, Sexton Street.	—	G.-D., F., L., M., and D.
6039	Limerick: Municipal Science, Art, and Technical Schools.	Subjects I., II., III., V. (Div. I.), Vp., VIIA., VIII., IX., X., Xp., XI., and XIIp.	G.-D., P., A.M., F., L., M., D.A., D., F.-F., and M.D. (Stage 2).
6147	Co. TIPPERARY: Cashel: Presentation Convent.	Subject V. (Div. I.)	F., S.L., L., D., and F.-F.
6382	Cashel: Technical School.	—	—
6356	Clonmel: Central Technical School.	Subjects I., III., Vp., VIIA., VIIA., and Xp.	F., L., and M.
6148	Thurles: Presentation Convent.	—	F., and D.
6060	Thurles: Ursuline Convent.	Subjects V. (Div. I.), X., and XIV.	—
6560	Co. WATERFORD: Dunscarvan: Technical School.	—	F., M., and G.-D.
6568	Lismore: Technical School.	—	F., and L.
6510	Tramore: Technical School.	Subject III.	G.-D., F., M., and D.
6477	Co. BOROUGH OF WATERFORD: Waterford: Central Technical Institute.	Subjects I., II., III., V. (Div. I.), Vp., VIIA., VII., VIII., VIIIc., IX., X., Xp., XI., XII., XIIp., XIII., and XXIII.	G.-D., P., S.L., F., L., M., Anat., D., Ptg. O., and F.-F.
6118	Waterford: Christian Brothers' Schools, Mount Esom.	—	G.-D., F., L., M., and D.
6084	Waterford: Convent of the Sacred Heart, Ferrybank.	—	G.-D., F., L., and M.
6100	Waterford: St. Anne's High School, Ursuline Convent.	—	G.-D., and L.
ULSTER.			
6338	Co. ANTRIM: Ballymena: Municipal Technical School.	Subjects I., II., III., Vp., VII., and XXVI.	G.-D., S.L., F., L., M., D., and F.-F.
6119	Ballymena: The Academy.	Subjects V. (Div. I.), V. (Div. II.), and VIII.	—
6850	Ballymoney: Technical School.	Subjects I., III., V., (Div. I.), and Vp.	G.-D., F., L., M., and D.
6845	Carrickfergus: Technical School.	Subjects I., II., III., and Vp.	F.
6232	Larne: Technical School.	Subjects I., II., III., V. (Div. I.), and XIV.	F. and M.
6635	Co. BOROUGH OF BELFAST: Belfast: Christian Brothers' Trades Preparatory School.	Subject Vp.	—
6080	Belfast: Christian Brothers' Schools, St. Mary's.	—	G.-D., F., L., M., and D.
6227	Belfast: Municipal Technical Institute.	Subjects I., II., III., IV., V. (Div. I.), V. (Div. II.), Vp., VIIA., VII., VII., VIIA., VIIA., VIIc., VIII., VIIIc., IX., X., Xp., XI., XII., XIIp., XIV., XVII., XXII., and XXV.	G.-D., P., Princ. O., S.L., A.M., F., C.O., L., M., D.L., D.A., Anat., D., H.O., Ptg. O., Arch., P.-F., M.A., M.D. (Stage 2), and M.L.
6071	Belfast: Victoria College.	—	F.

EXAMINATION CENTRES—continued.

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
6397	Co. ARMAGH : Armagh : Municipal Technical School.	Subjects I., III., Vp., XXIV., and XXVI.	G.-D., S.L., L., M., and D.
6438	Armagh : Natural History and Philosophical Society's Art Rooms.	—	F., L., M., and D.
6433	Lurgan : Convent of Our Lady of Mercy.	—	G.-D., F., L., and M.
6367	Lurgan : Municipal Technical School.	Subjects I., III., Vp., VIa., VIa., and VIIIc.	F., L., M., and D.
6374	Portadown : Municipal Technical School.	Subjects II., Vp., and VII.	G.-D., F., M., and D.
6273	Co. DUBLIN : Letterkenny : Loreto Convent.	—	S.L.
6382	Co. DOWN : Banbridge : Technical School.	Subject IX.	G.-D., and F.
6367	Bangor : Technical School.	Subjects V. (Div. I.), X., and Xp.	G.-D., F., L., M., D., and P.F.
6372	Holywood : Municipal Technical School.	—	G.-D., and F.
6344	Newry : Municipal Technical School.	Subjects I., III., V. (Div. I.), VIa., IX., X., and Xp.	G.-D., P., F., C.O., L., M., and D.
6445	Newtownards : Municipal Tech- nical School.	Subjects I., II., and III.	F., L., and M.
6472	Co. FERMANAGH : Enniskillen : Technical School.	Subjects I., III., Vp., and VII.	G.-D., and F.
6235	Co. LONDONDERRY : Coleraine : Technical School.	Subjects I., II., III., Vp., VIIIc., X., Xp., XXII., and XXVI.	G.-D., S.L., F., L., M. and D.
6376	Lisnaveady : Technical School.	—	F., M., and D.
6363	Magherafelt : Technical School.	Subject Vp.	F., and M.
6349	Co. BOROUGH OF LONDONDERRY : Londonderry : Convent of Our Lady of Mercy.	Subject XIV.	G.-D., F., and M.
6437	Londonderry : Municipal Tech- nical School.	Subjects I., II., III., V. (Div. I.), V. (Div. II.), Vp., VIa., VIa., VII., VIIa., VIIc., VIII., VIIIc., IX., X., and Xp.	G.-D., P., Princ. O., F., L., M., D.A., D., Ptg. O., Arch., and P.F.
6121	Co. MONAGHAN : Castledown : Technical School.	Subject III.	—
6323	Carrikmacross : Convent of St. Louis.	—	G.-D., F., and M.
6791	Co. TYRONE : Cookstown : Technical School.	—	G.-D., F., L., M., and D.
6681	Dungannon : Technical School.	Subjects III., IX., and X.	S.L., F., L., and D.
6707	Omagh : Technical School.	Subjects I., VIa., and X.	G.-D., F., and M.
6795	Strabane : Technical School.	Subject III.	F., and M.
CONNAUGHT.			
6594	Co. GALWAY : Ballinasloe : Technical School.	Subjects I., III., V. (Div. I.), and Vp.	F., L., M., D., and P.F.
6602	Galway : City of Galway Techni- cal Institute	Subjects III., V. (Div. I.), VIa., VIII., IX., X., and XXVI.	G.-D., F., L., M., and D.
6258	Co. MAYO : Ballina : St. Muredach's College.	Subjects III., and Vp.	G.-D., and D.
6766	Co. SLIGO : Sligo : Municipal Technical School.	Subjects I. and Vp.	G.-D., F., L., M., and D.

TABLE VII.

LOCAL SCIENCE AND ART EXAMINATIONS (IRELAND),  
1911.

## Summaries of Results.

Year	Number Examined.	Number of Passes.	Number of Failures.	Per centage of Passes.
1911. . . . .	6,035	3,198	2,837	52.99
1910. . . . .	5,926	3,638	2,288	61.39
1909. . . . .	6,142	3,535	2,607	57.55
1908. . . . .	5,919	3,587	2,332	60.60
1907. . . . .	6,330	3,641	2,688	57.44

(The corresponding figures for the Examinations of 1910 are given in light type.)

	Number Examined.	Number of Passes.	Number of Failures.	Percentage of Passes.
Science Examinations, . . . . .	2,646	1,746	902	65.94
	2,696	1,679	1,017	62.28
Art Examinations, . . . . .	3,367	1,452	1,935	42.87
	3,230	1,959	1,271	60.65

## SCIENCE EXAMINATIONS (IRELAND).

SUBJECT.	Stage 1.			Stage 2.			Stage 3.			Honours.		
	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.
I. Practical Plane and Solid Geometry.	140	38	41	47	6	18	3	3	5	11	—	4
	105	31	42	57	8	39	24	1	8	7	1	2
II. Machine Construction and Drawing.	122	30	43	67	11	28	22	2	7	4	—	1
	131	30	62	73	7	35	18	1	5	3	1	—
III. Building Construction and Drawing.	97	19	32	59	7	35	36	8	18	18	—	1
	103	24	36	50	7	23	41	7	20	16	—	—
IV. Naval Architecture.	22	8	10	5	1	4	8	2	4	8	1	1
	23	8	14	9	4	5	8	1	5	—	—	—
Va. Practical Mathematics.	147	89	48	140	46	81	43	4	5	—	—	—
	106	37	33	163	24	72	44	2	15	—	—	—
Do. (Section 1 only)	185	138*	—	—	—	—	—	—	—	—	—	—
	139	102*	—	—	—	—	—	—	—	—	—	—
VIa. Theoretical Mechanics (Solids).	58	8	29	49	8	29	9	—	4	—	—	—
	50	10	25	51	8	26	—	—	—	—	—	—
VIb. Theoretical Mechanics (Fluids).	8	1	3	18	5	12	5	—	3	—	—	—
	15	2	6	19	3	9	—	—	—	—	—	—
VII. Applied Mechanics	95	40	36	—	—	—	—	—	—	—	—	—
	90	32	36	—	—	—	—	—	—	—	—	—
VII(a). Applied Mechanics (Materials and Structures).	—	—	—	54	13	30	16	2	1	—	—	—
	—	—	—	53	22	28	20	1	10	—	—	—
VII(b) Applied Mechanics (Machines and Hydraulics).	—	—	—	30	5	14	3	2	—	—	—	—
	—	—	—	20	3	6	14	2	4	—	—	—
VIII. Sound, Light and Heat.	40	13	10	—	—	—	—	—	—	—	—	—
	42	10	17	—	—	—	—	—	—	—	—	—
VIIIa. Sound.	—	—	—	8	3	4	1	—	—	—	—	—
	—	—	—	8	—	5	—	—	—	1	—	—
VIIIb. Light.	—	—	—	12	2	8	1	—	—	—	—	—
	—	—	—	11	—	5	—	—	—	1	—	—
VIIIc. Heat.	—	—	—	28	2	17	3	—	—	—	—	—
	—	—	—	25	1	13	1	—	1	—	—	—
IX. Magnetism and Electricity.	99	15	29	32	1	11	5	—	1	—	—	—
	92	20	35	18	2	13	1	—	—	—	—	—
X. Theoretical Inorganic Chemistry.	75	16	38	50	—	22	4	—	1	—	—	—
	111	21	43	58	7	23	3	1	2	1	—	—
XI. Theoretical Organic Chemistry.	11	—	6	8	—	2	1	—	—	—	—	—
	9	1	2	3	3	—	1	—	—	—	—	—

\* Passes : only one class of success.

SCIENCE EXAMINATIONS (IRELAND)—*continued.*

SUBJECT.	Stage 1.			Stage 2.			Stage 3.			Honours.		
	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.
Xp. Practical Inorganic Chemistry.	62	14	17	34	10	10	6	—	2	—	—	—
	81	27	15	39	1	10	3	—	2	—	—	—
XIp. Practical Organic Chemistry.	9	1	2	2	—	—	4	—	1	—	—	—
	7	2	—	4	—	—	1	—	1	—	—	—
XII. Geology . . . .	3	1	—	—	—	—	—	—	—	—	—	—
	3	1	—	—	—	—	—	—	—	—	—	—
XIII. Mineralogy, . . .	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	2	—	—	—	1	—	—	—	—	—
XIV. Human Physiology, .	35	—	23	10	1	5	1	—	—	—	—	—
	44	7	11	17	—	7	—	—	—	—	—	—
XVI. Zoology, . . . .	1	—	1	—	—	—	—	—	—	—	—	—
	—	—	—	1	—	1	—	—	—	—	—	—
XVII. Botany, . . . .	13	6	3	1	—	—	—	—	—	—	—	—
	14	1	2	1	—	—	—	—	—	—	—	—
XIX. Theoretical Metallurgy,	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	1	—	1	—	—	—	—	—	—
XX. Navigation, . . . .	—	—	—	1	—	1	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
XXII. Heat Engines, . . .	60	13	30	22	4	11	16	1	11	—	—	—
	56	9	24	28	—	19	11	2	3	—	—	—
XXIII. Physiography, . . .	2	—	1	3	—	—	—	—	—	—	—	—
	3	1	2	5	—	1	—	—	—	—	—	—
Do. (Section I only)	14	*8	—	—	—	—	—	—	—	—	—	—
	13	*7	—	—	—	—	—	—	—	—	—	—
XXIV. Agricultural Science and Rural Economy (Section A).	—	—	—	5	3	1	—	—	—	—	—	—
	—	—	—	4	4	—	—	—	—	—	—	—
XXIV. Agricultural Science and Rural Economy (Section B).	—	—	—	1	—	1	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
XXIV. Agricultural Science and Rural Economy (Section C).	—	—	—	1	—	1	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—
XXIV. Agricultural Science and Rural Economy (Section D).	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	1	1	—	—	—	—	—	—	—
XXIV. Agricultural Science and Rural Economy (Section E).	—	—	—	1	1	—	—	—	—	—	—	—
	—	—	—	1	1	—	—	—	—	—	—	—
XXIV. Agricultural Science and Rural Economy (Section F).	—	—	—	3	2	1	—	—	—	—	—	—
	—	—	—	2	1	1	—	—	—	—	—	—

\* Passes : only one class of success.



SCIENCE EXAMINATIONS (IRELAND)—*continued.*

SUBJECT.	Stage 1. *			Stage 2.			Stage 3.			Honours.		
	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.
XXV. Hygiene, . . . . .	17	1	8	8	—	2	—	—	—	—	—	—
	55	6	21	22	—	10	1	—	1	—	—	—
XXVI. Elementary Science of Common Life, . . . . .	32	8	22	—	—	—	—	—	—	—	—	—
	36	6	11	—	—	—	—	—	—	—	—	—
Totals, . . . . .	1324	432	452	708	133	324	216	23	83	37	1	7
	1374	393	444	744	110	357	192	18	77	29	2	2

## SCIENCE EXAMINATIONS (IRELAND)—MATHEMATICS.

		Stages 1 to 7.			Honours.			
		Number Ex- amined.	1st Class.	2nd Class.	Number Ex- amined.	1st Class.	2nd Class.	
V. Mathematics,	Division I.	1	144	57	62	15	2	9
		2	141	41	76			
		3	89	16	50			
		4	106	21	50			
		5	62	31	30			
	Division II.	6	57	23	23	11	2	9
		7	—	—	—	—	—	—
		8	2	—	2	—	—	—
		9	41	6	23	—	—	—
		10	40	7	22	—	—	—
	Totals, . . . . .		348	112	168	15	2	9
		346	92	173	11	2	9	

## ART EXAMINATIONS (IRELAND).

SUBJECT.	Number Ex- amined	First Class.	Second Class.
Freehand Drawing in Outline, . . .	1,001	113	328
	980	193	570
Drawing in Light and Shade from a Cast, .	361	20	100
	344	20	124
Model Drawing, . . . . .	633	88	173
	607	174	235
Geometrical Drawing, . . . . .	416	68	196
	381	56	130
Perspective, . . . . .	81	12	43
	69	6	42
Drawing of Common Objects from Memory, .	20	6	7
	24	4	6
Memory Drawing of Plant Form, . . . . .	130	20	60
	124	22	63
Drawing from the Antique, . . . . .	58	27	17
	39	7	14
Drawing the Antique from Memory, . . . . .	18	1	3
	9	2	3
Drawing from Life, . . . . .	41	3	3
	42	—	11
Anatomy, . . . . .	16	2	9
	28	7	15
Painting Ornament . . . . .	31	4	3
	47	1	12
Painting from Still Life, . . . . .	85	9	27
	59	18	22
Principles of Ornament, . . . . .	38	—	4
	58	1	17
Historic Ornament, . . . . .	21	—	4
	14	—	10
Architecture, . . . . .	5	—	3
	7	—	3
Architectural Design, . . . . .	2	—	1
	2	—	—
Design, Stage I, . . . . .	255	11	127
	238	20	125
Design, Stage II, . . . . .	81	2	12
	98	—	14
Design, Honours, . . . . .	13	1	2
	11	—	1
Modelling the Head from Life, . . . . .	3	1	1
	9	2	—
Modelling from Life, . . . . .	10	—	2
	4	—	—
Modelling from the Antique, . . . . .	21	2	5
	26	1	5
Modelling Design, Stage II, . . . . .	15	—	2
	9	—	3
Modelling Design, Honours, . . . . .	2	—	—
	1	—	—
Totals, . . . . .	3,387	390	1,062
	3,230	534	1,425

### Free Studentships (Art) Awarded to Irish Students

#### BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Group.	Place in Order of Merit in Competition.
Paul, Philip R.	Drawing and Painting	2
Grew, Emma G. M.	Drawing and Painting	13

### King's Prize (Science) Awarded to an Irish Student.

#### BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Subject for which Prize was awarded.
Lowry, Frederick.	Heat Engines—Stage II.

### King's Prizes (Art) Awarded to Irish Students.

#### BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Subject for which Prize was awarded.
Megaw, Jeannette Irene.	Memory Drawing of Plant Form.
M'Cullough, Lilian.	Drawing in Light and Shade from a Cast.

#### LIMERICK: MUNICIPAL SCIENCE, ART, AND TECHNICAL SCHOOL.

Name of Candidate.	Subject for which Prize was awarded.
O'Carroll, Edward Thomas.	Model Drawing.

**Medals gained by Irish Students for securing First Class Successes  
in the Examinations in Honours of Science Subjects.**

**BALLYMENA : ACADEMY.**

Name of Candidate.	Subject for which Medal was awarded.
Acheson, James Alexander	Pure Mathematics—Division I.

**BELFAST : MUNICIPAL TECHNICAL INSTITUTE.**

Name of Candidate.	Subject for which Medal was awarded.
Hudson, Norman Leslie,	Naval Architecture.

**DUBLIN : CITY OF DUBLIN TECHNICAL SCHOOLS.**

Name of Candidate.	Subject for which Medal was awarded.
Casey, Thomas Augustine,	Pure Mathematics—Division I.

TABLE VIII.  
NATIONAL COMPETITION, 1911.

Medals, Prizes and Awards gained by Irish Students.

BELFAST : MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
Bell, Elizabeth A.,	Design for stained glass panel . . . .	National Book Prize.
Beal, Margaret, .	Modelled design for a frieze, . . . .	Commended.
Bredgett, Thomas, .	Modelled bust from the cast, . . . .	National Book Prize.
Burton, John, .	Design for damask table-napkin, . . . .	Bronze Medal.
Burton, John, .	Design for damask table-cloth, . . . .	Commended.
Burton, Emma S., .	Modelled figure from the cast, in relief, . . . .	Commended.
Dunlop, Elizabeth, .	Modelled head from the cast, . . . .	Commended.
Ferguson, Anne, .	Modelled figure from the cast, in relief, . . . .	Commended.
Geddis, Wilhelmina M.,	Design for stained glass panel, . . . .	Bronze Medal.
Gilmore, Elizabeth R.F.,	Shaded study of draped figure from life, . . . .	Commended.
Gilmore, Elizabeth R.F.,	Modelled head in relief from a cast in the round, . . . .	National Book Prize.
Grew, Emma G. M., .	Painting in oil colours, view of the interior of a building, . . . .	Commended.
Lilly, William, .	Studies of historic styles of ornament, . . . .	Commended.
M'Connell, James A., .	Modelled head from the antique, . . . .	National Book Prize.
M'Donnell, Susan A. G.,	Modelled figure from the cast, in relief, . . . .	Commended.
M'Dowell, Lucy, .	Design for encaustic tiles, . . . .	National Book Prize.
M'Kiver, Frank, .	Shaded drawing of a head from life, . . . .	National Book Prize.
Nelson, Marian, .	Design for a stained glass panel . . . .	National Book Prize.
Scott, Dorothy B., .	Modelled figures from the cast, in relief, . . . .	Bronze Medal.
Thompson, Frederick S.,	Model of a foot from life, . . . .	National Book Prize.

CORK : CRAWFORD MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
Anglin, Bessie, .	Designs for lace, . . . .	National Book Prize.
Elzina, Joseph, .	Model of a head from life, . . . .	Silver Medal.
Elzina, Joseph, .	Model of a head from life, . . . .	Commended.
M'Carthy, John M., .	Shaded drawing of a head from the antique, . . . .	Bronze Medal.
O'Neill, Mary, .	Studies of historic styles of ornament, . . . .	Commended.
Turnbull, Katherine M.,	Design for lace scarf, . . . .	Commended.

## DUBLIN : METROPOLITAN SCHOOL OF ART.

Name.	Description of Work.	Award.
Binsted, Augusta J.,	Monochrome painting of a bust from the east Study of historic style of ornament, worked in material.	Commended. National Book Prize.
Bowe, Francis, .	Monochrome painting of a figure from the east.	Commended.
Cassidy, Agnes, .	Designs based on a flowering plant, .	Commended.
Clarke, Harry, .	Designs for stained glass, .	Gold Medal.
Cox, Olive M.,	Studies of historic styles of ornament, .	National Book Prize.
	Design for crochet point collar, .	Commended.
	Group in oil colours, .	Silver Medal.
Crilley, Margaret,	Oil painting of a figure from the nude, .	Bronze Medal.
	Time sketches of figures from the nude, .	National Book Prize.
	Oil painting of a head from life, .	Commended.
Daves, Bertha R.,	Designs for lace scarf and fichu, .	Bronze Medal.
	Design for lace flounce, .	Commended.
Drury, Michael,	Model of a figure from the nude, .	Bronze Medal.
Elvery, Ellen, .	Studies of plant-form, .	Commended.
Evans, Helena, .	Studies of plant-form, .	Commended.
	Studies of historic styles of ornament, .	Commended.
Fox, Kathleen,	Design for a copper and silver mirror, .	National Book Prize.
	Design for lace scarf, .	Commended.
Garry, William, .	Design for stained glass panel, .	National Book Prize.
Gray, Hilda S.,	Design for lace chemise, .	Commended.
	Design for lace flounce, .	Commended.
Kington, Anne C.,	Design for lace pelerine and collar, .	Commended.
Lakeman, Ernest,	Study of historic style of ornament, worked in material.	Commended.
Lament, Jeannie,	Studies of plant-form, .	Commended.
Lang, Charlotte E.,	Design for damask table-cloth, .	Bronze Medal.
	Design for damask tea table-cloth, .	National Book Prize.
Luke, Effie, .	Design for enamelled copper candlestick, .	National Book Prize.
Meagher, Denis, .	Studies of plant-form, .	Commended.
Power, Albert G.,	Model of a figure from the nude, .	Gold Medal.
Quilty, Kathleen M.,	Design for enamelled metal bowl and stand, .	Silver Medal.
Rhind, Ethel,	Shaded drawings of heads and hands from life Group in oil-colours, .	Commended. Silver Medal.
Shator, James S.,	Time sketches of figures from the nude, .	National Book Prize.
Smith, William D.,	Design for panel in painted tiles, .	National Book Prize.

## LURGAN : MUNICIPAL TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
Munroe, Frederick A.,	Design for damask table-cloth, .	Commended.

## SLIGO : MUNICIPAL TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
M'Dermott, John J.,	Modelled head from the cast, in relief, .	National Book Prize.

TABLE IX.

EXAMINATIONS IN SUBJECTS OF TECHNOLOGY  
(IRELAND), 1911.

## Summaries of Results.

YEAR.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes
1911, . . . . .	934	499	16
1910, . . . . .	887	508	15
1909, . . . . .	907	512	10
1908, . . . . .	822	446	10
1907, . . . . .	875	488	8

(The corresponding figures for the Examinations of 1910 are given in light type.)

No. of School	Centre of Examination.	Number of Candi- dates Examined.	Number of Candi- dates Passed.	Number of Prizes.
6397	Armagh : Municipal Technical School,	16	5	—
6596	Ballinasloe : Technical School,	2	1	—
6611	Ballsbridge : Technical School,	8	7	—
6358	Ballymena : Municipal Technical School,	5	1	—
6850	Ballymoney : Technical School,	2	1	—
6227	Belfast : Municipal Technical Institute,	353	217	7
6248	Blackrock : Municipal Technical School,	250	168	9
6121	Castleblayney : Technical School,	6	2	—
6556	Clongowee : Central Technical School,	4	1	—
6235	Coburne : Technical School,	10	7	—
6903	Cork : Crawford Municipal Technical Institute,	18	14	—
6671	Doneraile : Technical School,	1	1	—
6416	Drogheda : Municipal Technical School,	10	6	—
6010	Dublin : City of Dublin Technical Schools,	20	11	—
6019	Dublin : Metropolitan School of Art,	256	102	1
6415	Dundalk : Municipal Technical School,	230	126	1
6381	Dungannon : Technical School,	4	3	—
6309	Dunbarrow : Technical School,	1	—	—
6872	Enniskillen : Technical School,	2	2	—
6151	Ferns : Technical School,	1	1	—
6066	Galway : City of Galway Technical Institute,	13	7	1
—	Gorey : Post Office	9	5	1
6607	Kilkenny : City Technical School,	10	2	—
6163	Kingstown : Municipal Technical School,	14	2	1
6232	Larne : Technical School,	1	1	—

**EXAMINATIONS IN SUBJECTS OF TECHNOLOGY (IRELAND), 1911—**  
*continued.*

No. of School	Centre of Examination.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes.
6039	Limerick : Municipal Science, Art and Technical Schools.	22	12	—
6037	Londonderry : Municipal Technical School.	45 19 29	22 12 15	1 — 1
6433	Lurgan : Convent of Our Lady of Mercy,	8	7	—
6367	Lurgan : Municipal Technical School,	18 20	15 17	1 1
6963	Magherafelt : Technical School, .	—	—	—
6544	Newry : Municipal Technical School,	1	1	—
6645	Newtownards : Municipal Technical School,	12 17	8 10	— —
6797	Omagh : Technical School, .	2 2	— —	— —
6604	Queenstown : Technical School, .	1 10	1 5	— —
6759	Ringaskiddy : Technical School, .	13 4	9 3	— —
6041	Ringseid : Pembroke Technical School,	—	—	—
6765	Sligo : Municipal Technical School,	3 26	1 13	— —
6798	Strabane : Technical School, .	8 7	3 3	— —
6571	Trillick : Central Technical School, .	3 —	2 —	— —
6477	Waterford : Central Technical Institute,	9 14 18	3 6 11	— — —
Totals, .		934 887	499 368	10 15

**Prizes and Medals gained by Irish Students.**

**BELFAST : MUNICIPAL TECHNICAL INSTITUTE.**

Name.	Subject	Grade.	Place taken at Examination.	Prize.
Brown, Thomas W.,	Structural Engineering.	Ordinary,	Second, (equal)	Bronze Medal
Dunwoody, David R.	Flax Spinning.	Ordinary,	First,	£2 (Clothworkers) and Bronze Medal.
Fairclough, John,	Boilermakers' Work.	Ordinary,	First,	£2 (Founders) and Bronze Medal.
Kebo, William A.,	Flax Spinning.	Ordinary,	Third,	Bronze Medal.
Lamont, Joseph P.,	Linen Weaving (Designing).	Honours,	First,	£2 (Clothworkers) and Silver Medal.
Langtry, William R.,	Linen Weaving	Ordinary,	Third,	Bronze Medal.
Oldham, Thomas H.,	Flax Spinning.	Honours,	First,	£2 (Clothworkers) and Silver Medal.

**DUBLIN : CITY OF DUBLIN TECHNICAL SCHOOLS.**

Name.	Subject	Grade.	Place taken at Examination.	Prize.
Keogh, Hugh,	Plasterers' Work.	Ordinary,	Second,	£1 10s. (Plasterers) and Bronze Medal.



Prizes and Medals gained by Irish Students.—*continued.*

## FERMOY : TECHNICAL SCHOOL.

Name.	Subject	Grade.	Place taken at Examination.	Prize.
Coughlan, Patrick,	Masonry,	Honours,	Second, (equal)	£1 5s. (Cordwainers) and Silver Medal.

## LURGAN : MUNICIPAL TECHNICAL SCHOOL.

Name.	Subject	Grade.	Place taken at Examination.	Prize.
McEvoy, Francis,	Linen Weaving	Ordinary,	Second, (equal)	15s. (Clothworkers) and Bronze Medal.

LIST of IRISH CANDIDATES awarded SCHOLARSHIPS and EXHIBITIONS offered by the WORSHIPFUL COMPANY of DRAPERS on the results of the Examinations of the City and Guilds of London Institute in the several branches of TEXTILE MANUFACTURE.

*One Scholarship of the Annual Value of £60, in addition to College Fees, tenable for two years.*

Livingston, William M. (Linen Weaving)—Lurgan : Municipal Technical School.

*Three Exhibitions of the Annual Value of £10, tenable for two years.*

Crozier, Joseph (Linen Weaving)—Lurgan : Municipal Technical School.

Dunwoody, David R. (Flax Spinning)—Belfast Municipal Technical Institute.

Gilpin, George (Linen Weaving)—Lurgan : Municipal Technical School.

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EXTRACT from the ANNUAL REPORT of the *City and Guilds of London Institute* for the SESSION 1910-11.

"The number of registered classes in Technology and of Students in attendance have both increased as compared with last year, from 198 to 209, and from 2,537 to 2,709 respectively, but the number of successful Candidates is slightly less, viz., 499 as compared with 508. Of the prizes and medals offered by the Institute, 10 have been awarded to Students in Ireland. At the examinations in Manual Training, two Candidates qualified for Teachers' Certificates in Woodwork, and ten passed the First Year's examination, whilst one passed the First Year's examination in Metalwork and two qualified for the Teachers' Certificate in that subject. Of the Scholarships and Exhibitions in Textiles, offered by the Drapers' Company, one Scholarship and three Exhibitions were awarded to Irish students."



The following students were awarded the Diploma of Associate of the Royal College of Science on the results of the Sessional Examinations held in June, 1911:—

*Faculty of Engineering.*—R. W. Duncan, D. McAlonan, W. C. McWhinney.

*Faculty of Applied Chemistry.*—P. A. McKenna, J. Reilly, A. T. Henley, H. W. Moss, W. G. Rea.

*Faculty of Agriculture.*—J. Crowley, N. Dromey, M. J. Gorman, J. Mahony, P. T. O'Hare, M. J. O'Leary, A. Scully, E. Gallagher, P. Murphy.

*Teachers-in-Training.*—Chemistry Section—J. H. Cooke, Miss B. B. S. Dawson, D. Hayes, Miss G. V. Morrow, H. R. S. Clotworthy.

“ “ Physics Section—W. M. Wakeley.

“ “ Natural Science Section—Miss B. McL. Blair, Miss E. A. Scott.

Mr. W. C. McWhinney, who obtained his Associateship in Engineering this year, was awarded one of the newly-founded Industrial Bursaries—value, £100 a year, renewable for a second year—by the Royal Commissioners for the Exhibition of 1851, in competition with other Colleges. For the tenure of his bursary he has entered the works of the Lanchester Motor Co.

A limited number of Research Studentships having been established, as mentioned in the Report of last year, the Council received five applications and awarded four Studentships in Chemistry.

At the close of the Session, the Council was honoured by the announcement that His Majesty King George V., during his visit to Dublin, would open the new buildings of the Royal College of Science, the first stone of which was laid by His Majesty King Edward VII., in 1904.

On July 8th, the King and Queen visited the building in state, and the Professors and Registrar had the honour of being presented to their Majesties.

Unfortunately, owing to very serious illness, W. N. Hartley, D.Sc., F.R.S., Professor of Chemistry and Dean of Faculty, was incapacitated from the duty of attendance, and from receiving the honour of knighthood from the King, in person, on that occasion.

I have the honour to be, Sir,

Your obedient Servant,

W. N. HARTLEY.

## CHEMISTRY.

Professor :—W. N. HARTLEY, D.Sc., F.R.S.

The number of students attending the courses of Chemistry were :—Thirty-six of the first year, twenty-five of the second year, six of the third year, and four research students.

To the students of the first year, fifty-five lectures were delivered by the Professor on General Chemistry, including the outlines and principles of Metallurgy and Thermo-Chemistry. To students of the third year and to the research students he delivered a course of thirteen lectures on the Applications of Spectroscopy to Chemical Analysis and Research, which was attended by nine students.

In the chemical laboratories there were thirty-six students of the first year in charge of Dr. Pollok and Mr. Moss.

The total number of students attending the various courses in Chemistry was seventy-one.

## RESEARCH WORK.

The following papers have been published :—

“On some Mineral Constituents of a Dusty Atmosphere.”  
By Professor Hartley. (Proc. Roy. Soc., June, 1911,  
Vol. 85, p. 271).

“The course of Chemical Change in Quinol under the  
Influence of Radiant Energy.” By Walter Noel  
Hartley and Otway Henry Little. (Transactions of  
the Chemical Society, 1911. Vol. 99, pp. 1079-1091).

## ORGANIC CHEMISTRY.

Lecturer :—A. O'Farrelly, M.A.

The usual course of fifty lectures on Organic Chemistry was given during the first and second terms. This course was attended by eleven students of the second year and by such students of the third year as wished to attend. The introductory lectures were also attended by thirteen agricultural students. A special course of lectures on Advanced Chemistry was given during the third term, which was attended by the third year students and the post-graduates.

A special short course, consisting of ten lectures and a practical introduction to the methods of Organic Chemistry, was given in the third term to thirteen agricultural students.

In the laboratory, separate courses of instruction were given by the Lecturer to six Teachers-in-Training, to five students of the second year in the Faculty of Applied Chemistry, and to six students of the third year.

There were also four research students of the fourth year, who were engaged in various original investigations, and whose work was highly creditable. This work is being continued.

## ELECTRO-TECHNOLOGY AND PHYSICS.

## ELECTRO-TECHNOLOGY.

PROFESSOR :—W. BROWN, B.SC., M.I.E.E., M.R.I.A.

There were twenty-three students in the second year, viz., ten in the Faculty of Engineering, six in the Faculty of Applied Chemistry, six Teachers-in-Training, and one occasional student.

Fifty lectures were delivered by the Professor, the whole of which were attended by the Engineering students, thirty-two by the Teachers-in-Training, and eighteen by the students of Chemistry. There were twelve Tutorial classes given by Mr. Allen.

The Laboratory work consisted of fifty-eight lessons given by the Professor and Mr. Allen, the whole of which were attended by the Engineers, thirty-eight by the Teachers-in-Training, and thirty by the Chemists.

The course in the Third Year consisted of fifty-five lectures delivered by the Professor, attended by eight students; and seventy-six Laboratory lessons, including dynamo design and drawing, under the Professor and Mr. Allen.

During the session, the Third Year students in Engineering were taken to visit the Electrical Lighting and Power Stations at Ringsend, Ballsbridge, Rathmines, and Fleet Street, Dublin.

The Professor read a paper before the Royal Dublin Society on "Mechanical Stress and Magnetisation of Nickel (Part 2), and the subsidence of torsional oscillations in Nickel and Iron wires, when subjected to the influence of longitudinal magnetic fields"; which was published in their Scientific Proceedings.

Mr. W. J. Lyons, B.A., A.R.C.S.C. (London), read a paper before the Royal Dublin Society on "A method of exact determination of the continuous change in absolute Density of a Substance, e.g., Wax, in passing through its fusion stage," which was published in their Scientific Proceedings.

## PHYSICS.

LECTURER :—FELIX E. HACKETT, M.A., B.SC., PH.D.

The course of instruction in the first year consisted of sixty-one lectures and sixty-one laboratory lessons. It was attended by thirty-five students, of whom thirty-two were associate students and three were non-associate students.

The general course of instruction in the second year consisted of thirty-three lectures and thirty-three laboratory lessons. Students in the Faculty of Engineering were given a special course in the laboratory, extending over twenty lessons. The course of lectures was attended by twenty-two associate students and one occasional student. Of the associate students, ten were in the Faculty of Engineering, six were in the Faculty of Applied Chemistry, and six were Teachers-in-Training.

The course for the third year was taken by one Teacher-in-Training, who received eighty-four lectures and carried out a course of advanced work in the laboratory during the year.

The general work in the laboratory was in charge of Mr. W. J. LYONS, B.A., A.R.C.S.C.L., and Mr. F. W. WARWICK, B.A., B.E., A.R.C.S.C.L., under the direction of the Lecturer.

## MATHEMATICS.

PROFESSOR :—W. MCFADDEN ORR, M.A., F.R.S.

In the Department of Mathematics the following lectures were delivered :—

By PROFESSOR ORR :—

To first year students.—Eighty-one lectures in Pure Mathematics; sixty-five lectures in Mechanics.

To second year students.—Thirty-nine lectures in Pure Mathematics; thirty-eight lectures in Mechanics.

To third year students.—Sixty-five lectures in Applied Mechanics; forty-five lectures in Thermodynamics; ten lectures in Mathematical Physics.

The usual exercise classes for students of the second and of the third year were also held.

By DR. JOHNSON :—

To first year students.—Eighty-six lectures in Mathematics.

To second year students.—Twenty-seven lectures in Mathematics; thirty lectures in Mechanics.

To third year students.—Eighteen lectures in Mechanism; Fifty-three lectures in Mathematics.

The first year class for Mathematical Exercises also met on twenty-six occasions.

## AGRICULTURE.

PROFESSOR :—JAMES WILSON, M.A., B.Sc.

During the Session 1910-11, 143 lectures in Agriculture were given. There were ten students in the class, and eight of them were awarded the Diploma of the College at the end of the Session.

## AGRICULTURAL BIOLOGY.

LECTURER :—DAVID HOUSTON, F.L.S.

A course of lectures, with corresponding laboratory work in Agricultural Botany, was given during the first term to agricultural students and one horticultural pupil of the third year. All the candidates passed the Sessional Examination.

During the third term, a course of lectures, with accompanying laboratory instruction on Agricultural Bacteriology, was given to the third year agricultural students.

An investigation for the Department on the effect of salt and various chemical preservatives on the keeping qualities of butter was carried on and completed during the Summer and early Autumn months.

## AGRICULTURAL CHEMISTRY.

LECTURER :—GEORGE STEPHENSON.

This course, which comprised thirty lectures and fifty-two laboratory lessons, was attended by twelve students, all of them candidates for the Associateship, eleven in Agriculture and one in Forestry.

For the past nine sessions—ever since its commencement—this course has been given in the laboratory of the Albert Agricultural College, which, though not specially equipped for advanced classes, has afforded excellent facilities for the work. The College Farm, too, has been freely drawn upon for material and examples, and the thanks of the Lecturer and his colleagues are due to the various members of the College staff for their ready assistance, which has contributed materially to the efficiency of the teaching and to the comfort of all concerned.

## GEOLOGY AND MINERALOGY.

PROFESSOR :—GRENVILLE A. J. COLE, M.R.L.A., F.G.S.

The following courses were carried out, as arranged for in the Programme of Studies :—

I. *Mineralogy*.—Thirty lectures by the Professor, with twenty-three days' practical work, including one field-excursion to the Ovoca Mines, attended by eight students of the Faculty of Chemistry in their third year.

II. *Geology*.—Forty-five lectures by the Professor, and thirty-four days' practical work, including seven field-excursions, attended by thirteen students of the Faculty of Agriculture in their second year, and one occasional student. The field-work included a visit to the Chalk and Basalt near Belfast, the class voluntarily devoting a Saturday to this excursion.

III. *Geology for Teachers-in-Training* in their third year.—The same course as in the Faculty of Agriculture, with additional practical lessons in petrology and palæontology, attended by two students. An additional field-excursion, in connexion with that to Belfast, was made to the igneous rocks of Carlingford.

IV. *Geology for Teachers-in-Training* in their second year.—A course of thirteen lectures and fifteen days' practical work, including five field-excursions, attended by six Teachers-in-Training, and one occasional student. In connexion with a

botanical visit to Avondale, a night was spent at Glendalough, and the class proceeded next day by Lough Nahanagan and Wicklow Gap to Poulaphouca.

*V. Soil-Physics.*—A course of six lectures and ten days' practical work, including one field-excursion, attended by thirteen students of the Faculty of Agriculture. The excursion was to the Department's agricultural station at Ballyhaise, where Mr. T. Hallissy, of the Geological Survey, explained the types of soil and the principles adopted in soil-mapping.

Among the additions to the Geological Collections may be mentioned :—

A series of mineral ores from Cobalt, Ontario.

Models of the "Star of the South" and "Stewart" diamonds.

Ten photogravure portraits of eminent geologists.

A card-catalogue of the geological lantern slides has been prepared.

The following papers were published :—

"On the mineral condition of the calcium carbonate in fossil shells." By G. A. J. Cole and O. H. Little, *Geol. Mag.*, 1911, p. 49.

"Glacial features in Spitsbergen in relation to Irish Geology." By G. A. J. Cole. *Proc. Roy. Irish Acad.*, vol. xxix., Section B., p. 191.

## BOTANY.

PROFESSOR :—T. JOHNSON, D.S.C., F.L.S.

The usual courses in Structural and Systematic Botany for Associate students were held and attended by thirteen agricultural students and eight technical scholars.

A special course in "Timber and its diseases" was attended by a third year student in Forestry.

As the Professor of Botany was set free from the charge of the Seed-testing Station, after ten years' direction of it, he has been able to give undivided attention to the Botanical teaching in the College and to the Botanical Collections in the National Museum during the past session.

The course in Plant Pathology was conducted partly in the Museum and partly in the College.

Papers published.

T. JOHNSON :—

- (1.) "Is *Archæopteris* a Pteridosperm?" (see *Proc. R.D.S.*, vol. xiii. N.S., 1911).
- (2.) "The occurrence of *Archæopteris* Tschermaki Stur and of other species of *Archæopteris* in Ireland" (*op. cit.*, 1911).



## ZOOLOGY.

PROFESSOR :—GEORGE H. CARPENTER, B.S.C., M.R.I.A.

*Teaching.*—The second year students of the Faculty of Agriculture received, as usual, their zoological instruction during the first term. Eleven students attended the laboratory on fifty-four days, and received fifty-one lectures. The course for third year Teachers-in-Training, held concurrently, was attended by two students. This course comprised fifty-four full days' laboratory work, forty-nine lectures from the Professor and sixteen lectures on Hygiene from Dr. Clarke. The students of these classes did zoological field work on six days during the second and third terms.

In the third term, the short course for second year Teachers was attended by six students who studied in the laboratory on twenty-one days, did zoological field work on three days, and received eighteen lectures. A third year course in Entomology for a Forestry Scholar of the Faculty of Agriculture was carried on through the third term.

Owing to serious illness, the Professor was unavoidably absent for the last five weeks of the third term. The Teachers' class was then ably conducted by Dr. Clarke who gave ten of the lectures. By kind permission of Dr. Scharff, the Forestry student worked in the National Museum under the capable supervision of Mr. J. N. Halbert.

Miss M. C. MacDowell, an Associate of the College, pursued a fourth year course during the session. Her first and third terms were mainly devoted to advanced work in Physiology and Hygiene under Dr. Clarke's supervision.

*Albert College.*—During the second term, the Professor conducted, as in recent years, nine evening classes for horticultural students from the Albert College, Glasnevin. He also attended at that College on six days to supervise the zoological teaching to the agricultural students there.

*Delegations.*—In April, the Professor visited Birmingham and presided over the meeting of the Association of Economic Biologists.

*Research.*—Miss M. C. MacDowell devoted the second term of the session to a study of the jaws of some coleopterous larvæ, on which a paper will shortly be published. The papers by the Professor published during the session were :—

"New Irish Apterygota." *Irish Naturalist*, Vol. XX., 1911.

"Notes on the Warble Fly of the Reindeer." *Journ. Econ. Biol.*, Vol. V., 1910.

"Some Dipterous Larvæ from the Turnip." *Journ. Econ. Biol.*, Vol. VI., 1911.

"Injurious Insects and other Animals observed in Ireland during the year 1910." *Econ. Proc. R. Dublin Soc.*, Vol. II., 1911., No. 3.

"Notes on the Oestrinæ." *Ier Congres International d'Entomologie*, 1910.

Articles on "Hexapoda," "Aptera," "Coleoptera," "Hemiptera," "Hymenoptera," "Lepidoptera," "Neuroptera," "Orthoptera," and other entomological subjects, contributed by the Professor to the 11th edition of the *Encyclopædia Britannica*, were also published during the session.

## ENGINEERING.

PROFESSOR :—H. H. JEFFCOTT, B.A.I., M.I.MECH.E.

LECTURER :—J. TAYLOR, M.A.

In the Department of Engineering the following courses of instruction were given during the session :—

To the first year students a course in Practical Geometry and Mechanical Drawing of twenty-nine lectures by Mr. Taylor, and thirty practical lessons. Attended by thirty four students.

To the second year Engineering students, a course in Machine Construction and Steam Boiler Practice, of sixty-two lectures, by Professor Jeffcott; eighty-six lessons in the Drawing Schools, Laboratory and Workshop. Attended by thirteen students.

To the second and third year Engineers a course in Surveying and Levelling, of twenty-eight lectures by Mr. Taylor, and eight days' field work, and twenty-eight lessons in Mapping and Plotting. Attended by eighteen students.

To the third year Engineering students a course in Structural Engineering and the Design of Steam Engines, Turbines, Gas and Oil Engines and Hydraulic Machinery of sixty-four lectures by Mr. Taylor, and one hundred and twenty-four lessons in the Engineering Schools. Attended by eight students.

To the second year Agricultural students, a course in Surveying and Levelling, of seventeen lectures by Mr. Taylor, and five days' field work, and sixteen lessons in Mapping and Plotting. Attended by thirteen students.

To the third year Agricultural students, a course in Building Construction and Agricultural Engineering, of twenty lectures by Professor Jeffcott, and nine lessons in the Engineering Schools and workshops. Attended by thirteen students.

In addition to the Associate students, there were ten non-associate students attending the various courses in the Engineering Schools.

Visits were made during the session to various engineering works, including G. S. & W. Rly. Works, Inchicore; M. G. W. Rly. Works, Broadstone; Pigeon House Power Station; and the new works at Roundwood.

# REPORT OF THE REGISTRAR OF THE ROYAL COLLEGE OF SCIENCE FOR IRELAND FOR THE SESSION 1910-11.

The number of Students who attended the College during the Session 1910-11 was 121; of which 20 were Non-Associate Students and 96 Associates—including two Local Exhibitioners undergoing a three years' course. There were, in addition, one Special Research Scholar and four Post-Graduates to whom Research Studentships had been awarded under the Scheme inaugurated by the Department in the Session 1909-10.

The corresponding numbers for the past five years were:—

Session.	Associate.	Non-Associate.
1905-6,	83	38
1906-7,	68	38
1907-8,	73	33
1908-9,	85	32
1909-10,	92	26

The 96 Associate Students were divided as follows:—

First Year,	34
Second Year,	35
Third Year,	27

The following Third Year Students passed their final Sessional examinations and were awarded the Diploma of Associate of the College:—

*Faculty of Engineering.*—R. W. Duncan, D. McAlonan, W. C. McWhinney.

*Faculty of Applied Chemistry.*—P. A. McKenna, J. Reilly, A. T. Henley, H. W. Moss, W. G. Rea.

*Faculty of Agriculture.*—J. Crowley, N. Dromey, M. J. Gorman, J. Mahony, P. T. O'Hare, M. J. O'Leary, A. Scully, E. Gallagher, P. Murphy.

*Teachers-in-Training, Chemistry Section.*—J. H. Cooke, Miss B. B. S. Dawson, D. Hayes, Miss G. V. Morrow, H. R. S. Clotworthy.

*Physics Section.*—W. M. Wakeley.

*Natural Science Section.*—Miss B. McL. Blair, Miss E. A. Scott.

Of the two Royal Scholarships offered for competition to Associate Students of the First Year who are not Science and Technological Scholars, Teachers-in-Training, Local or other Exhibitioners, one only was awarded, viz., to Mr. George Harris, the standard attained by the other competitors not being considered sufficiently high for the award of the Second Scholarship.

The Silver Medal offered for competition to all First Year Associate students was won by Mr. James Nagle.

The following is a complete list of the Scholarships, Medal, and Prizes awarded on the results of the Sessional Examinations:—

## 1910-11.

Silver Medal,	..	..	..	Mr. James Nagle.
First Royal Scholarship,	..	..	..	Mr. George Harris.
Second Royal Scholarship,	..	..	..	Not awarded.

## PRIZES.

### FIRST YEAR.

*Mathematics.*—Upper Division.—J. J. Smith, 1st.

W. Perry, 2nd.

*Mathematics.*—Lower Division.—E. J. Kennedy, 1st.

T. Blake, 2nd.

*Mechanics.*—J. Nagle, 1st.

J. J. Smith, 2nd.

*Practical Geometry.*—M. Keady  
A. M. McLoughlin } Prizes divided.

- Experimental Physics*.—J. Nagle, 1st.  
A. M. McLoughlin, 2nd.  
*Chemistry*.—J. J. Smith, 1st.  
J. Nagle, 2nd.

## SECOND YEAR.

- Mathematics*.—O. McKenna, 1st.  
W. M. O'Riordan, 2nd.  
*Mechanics*.—O. McKenna, 1st.  
W. M. O'Riordan, 2nd.  
*Machine Construction*.—R. J. England, 1st.  
R. J. Lannon, 2nd.  
*Physics*.—O. McKenna, 1st.  
A. F. O'Dowd, 2nd.  
*Electro-Technology (Chemists)*.—P. O'Connor, 1st.  
R. Fleming, 2nd.  
(Teachers).—W. M. O'Riordan, 1st.  
O. McKenna, 2nd.  
(Engineers).—J. Lowry, 1st.  
R. J. Lannon, 2nd.  
*Organic Chemistry*.—W. M. O'Riordan, 1st.  
O. McKenna, 2nd.  
*Mineral Analysis (Teachers)*.—R. L. Valentine, 1st.  
W. M. O'Riordan, 2nd.  
(Chemists).—P. O'Connor, Prize.  
*Botany (Teachers)*.—R. L. Valentine, 1st.  
Miss A. M. Hemphill }  
W. M. O'Riordan } 2nd divided  
*Geology (Teachers)*.—W. M. O'Riordan, 1st.  
R. L. Valentine, 2nd.  
*Zoology (Teachers)*.—R. L. Valentine, 1st.  
Miss A. M. Hemphill, 2nd.

## SECOND YEAR, AGRICULTURE.

- Botany*.—W. McLean, 1st.  
M. Caffrey, 2nd.  
*Geology*.—T. R. Hewitt, 1st.  
M. Caffrey }  
T. O'Connell } 2nd divided.  
*Zoology*.—T. R. Hewitt }  
W. McLean } Prizes divided.  
*Soil Physics*.—W. McLean, 1st.  
T. R. Hewitt, 2nd.  
*Surveying*.—T. R. Hewitt, 1st.  
W. McLean, 2nd.

## THIRD YEAR.

- Mathematical Physics*.—W. M. Wakeley, Prize.  
*Applied Mechanics*.—D. McAlonan, 1st.  
R. W. Duncan, 2nd.  
*Thermodynamics*.—J. Reilly, 1st.  
D. Hayes }  
D. McAlonan } 2nd divided.  
*Engineering*.—R. W. Duncan, 1st.  
N. E. W. Sloan, 2nd.  
*Surveying*.—S. W. Irwin, 1st.  
N. E. W. Sloan, 2nd.  
*Mechanism*.—R. W. Duncan, 1st.  
D. McAlonan, 2nd.  
*Electro-Technology*.—S. W. Irwin, 1st.  
R. W. Duncan, 2nd.  
*Analytical Chemistry*.—J. Reilly, 1st.  
Miss G. V. Morrow, 2nd.

- Mineralogy*.—D. Hayes } Prizes divided.  
J. Reilly }  
*Botany (Teachers)*.—Miss B. McL. Blair, Prize.  
*Geology (Teachers)*.—Miss B. McL. Blair, Prize.  
*Zoology (Teachers)*.—Miss B. McL. Blair, Prize.

### THIRD YEAR, AGRICULTURE.

- Agriculture*.—M. J. O'Leary, 1st.  
A. Scully, 2nd.  
*Agricultural Bacteriology*.—P. T. O'Hare, 1st.  
A. Scully, 2nd.  
*Agricultural Botany*.—M. J. Gorman, 1st.  
A. Scully, 2nd.  
*Agricultural Chemistry*.—M. J. Gorman, 1st.  
P. A. Murphy, 2nd.  
*Veterinary Science*.—A. Scully, 1st.  
P. T. O'Hare, 2nd.  
*Engineering*.—J. Crowley } Prizes divided.  
J. J. Hegarty }

Short Summer Courses of Lectures and Laboratory work for Science Teachers engaged in Secondary and Technical Schools carrying out the Department's Scheme of Technical Instruction throughout the country were held during the month of July in the following subjects:—

- Chemistry, Second Year, attended by 29 Students.  
Chemistry, Third Year, attended by 12 Students.  
Chemistry, Fourth Year, attended by 35 Students.  
Physics, Third Year, attended by 7 Students.  
Physics, Fourth Year, attended by 16 Students.  
Mechanical Science, Third Year, attended by 9 Students.  
Mechanical Science, Fourth Year, attended by 6 Students.  
Physical Geography, attended by 40 Students.  
Hygiene and Sick Nursing, attended by 17 Students.

At the end of the course there was a Theoretical and Practical examination in each subject.

There was also a course on Rural Economy and School Gardening during the month of August, attended by 28 students for the First Year, and 21 Students for the Second Year of the course. This course is intended mainly for Teachers working under the Board of National Education and was conducted partly at the College and partly at the Albert Agricultural College, Glasnevin, and at the Kingstown Technical School Gardens.

It is a pleasure to be able to record that of the twenty-five students to whom the Diploma was awarded last June, the great majority have since obtained employment or are further engaged in academical work, as follows:—

One was awarded one of the Industrial Bursaries recently established by the Royal Commissioners for the Exhibition of 1851, value, £100 per year, and renewable for a second year; one was awarded a Special Research Scholarship and one a Research Studentship for the session 1911-12. Four have been appointed to positions in the British Thomson-Houston Electrical Engineering Works, Rugby; one has been appointed House Master at the Albert Agricultural College, Glasnevin; one as Technical Assistant in the Agricultural Branch of the Department; one has been appointed Assistant in the Department's Seed Testing Station; one as Science and Mathematical Master in the Christian Brothers' Day Trades' Preparatory School, Belfast; one as Science Master in the Blackrock Technical Institute; one as Science Mistress in the Royal School, Dunganon, and another as Science Mistress in the Secondary School, Newport; six as Instructors in Agriculture under different County Committees of Agriculture in Ireland.

P. A. E. DOWLING,  
Registrar.

# METROPOLITAN SCHOOL OF ART, DUBLIN.

## *Report of the Headmaster for the Session 1910-1911.*

The total number of students who attended the School during the Session 1910-11 was 426, of whom 204 attended the day, and 222 the evening classes; these included 196 males and 230 females.

In the Personal Art Examinations, held under the Board of Education, the following number of successes were obtained in the subjects named:—

Freshand Drawing in Outline . . . . .	31
Model Drawing, . . . . .	11
Drawing in Light and Shade from a Cast, . . . . .	15
Geometrical Drawing, . . . . .	17
Perspective, . . . . .	16
Memory Drawing of Plant Form, . . . . .	15
Drawing of Common Objects from Memory, . . . . .	6
Design, Stage 1, . . . . .	11
Design, Stage 2, . . . . .	3
Design, Honours, . . . . .	2
Drawing from the Antique, . . . . .	13
Painting Ornament, . . . . .	3
Painting from Still Life, . . . . .	7
Principles of Ornament, . . . . .	1
Modelling the Head from Life, . . . . .	1
Modelling from Life, . . . . .	1
Modelling from the Antique, . . . . .	1
Practical Plane and Solid Geometry, Stage 1, . . . . .	4
Elementary Modelling (held by the Department of Agriculture and Technical Instruction for Ireland,) . . . . .	3
Drawing on the Blackboard do. . . . .	5
Total, . . . . .	166

The total number of works submitted to the Board of Education for Teachers' Certificates and for the National Competition was 276; of these 102 were for Teachers' Certificates.

The total number of works accepted for Certificates was 71, of which 63 were for the Art Class Teacher's Certificate, and 8 for the Art Master's Certificates, Groups I., II., and III.

In the NATIONAL COMPETITION the School was awarded two Gold Medals, three Silver Medals, four Bronze Medals, nine National Book Prizes, and seventeen Commendations as below.

### *Gold Medals.—*

- Clarke, Harry, Designs for Stained Glass (Subject 23d).  
Power, Albert G., Model of a Figure from the Nude (Subject 19e).

### *Silver Medals.—*

- Crilley, Margaret, Group in Oil Colours (Subject 15a).  
Quigly, Kathleen M., Design for Enamelled Metal Bowl and Stand (Subject 24a).  
Slator, James S., Group in Oil Colours (Subject 15a).

### *Bronze Medals.—*

- Crilley, Margaret, Oil Painting of a Figure from the Nude (Subject 17c).  
Dawes, Bertha R., Designs for Lace Scarf and Fichu (Subject 23c).  
Drury, Michael, Model of a Figure from the Nude (Subject 19e).  
Lang, Charlotte E., Design for Damask Table-cloth (Subject 23c).

*Book Prizes.—*

- Binsted, Augusta J., Study of Historic Styles of Ornament in Stained Glass (Subject 24a).  
 Cox, Olive M., Studies of Historic Styles of Ornament (Subject 22d).  
 Crilley, Margaret, Time Sketches of Figures from the Nude (Subject 8e).  
 Fox, Kathleen, Design for a Copper and Silver Mirror (Subject 24a).  
 Garry, William, Design for Stained Glass Panel (Subject 23d and 24a).  
 Lang, Charlotte E., Design for Damask Tea-table cloth (Subject 23c).  
 Luke, Effie, Design for Enamelled Copper Candlestick (Subject 24a).  
 Slator, James S., Time Sketches of Figures from the Nude (Subject 8e).  
 Smith, William D., Design for Panel in Painted Tiles (Subject 23c).

*Commended.—*

- Binsted, Augusta J., Monochrome Painting of a Bust from the Cast (Subject 16a).  
 Bows, Francis, Monochrome Painting of a Figure from the Cast (Subject 16a).  
 Cassidy, Agnes, Designs based on a Flowering Plant (Subject 14-22).  
 Cox, Olive M., Design for Crochet Point Collar (Subject 23c).  
 Crilley, Margaret, Oil Painting of a Head from Life (Subject 17b).  
 Dawes, Bertha R., Design for Lace Founce (Subject 23c).  
 Drury, Michael, Studies of Plant Form (Subject 10).  
 Elvery, Eileen, Studies of Plant Form (Subject 10).  
 Evans, Helena, Studies of Historic Styles of Ornament (Subject 22d).  
 Fox, Kathleen, Design for Lace Scarf (Subject 23c).  
 Gray, Hilda S., Design for Lace Chemisette (Subject 23c).  
 Kingston, Annie C., Design for Lace Founce (Subject 23c).  
 Kingston, Annie C., Design for Lace Pelerine and Collar (Subject 23c).  
 Lakeman, Ernest, Study of Historic Styles of Ornament in Stained Glass (Subject 24a).  
 Lamont, Jeannie, Studies of Plant Form (Subject 10).  
 Meagher, Denis, Studies of Plant Form (Subject 10).  
 Rhind, Ethel, Shaded Drawings of Heads and Hands from Life (Subject 8c.).

The Metropolitan School of Art has taken this year a distinguished place in the National Art Competition. The awards to the work of the Students are not only numerous, but are of a high class, and constitute a record for the School. Out of the ten Gold Medals awarded for competition the School has obtained two, and thus shares with one school in London the honour of the first place in the National Competition among Schools of Art. In the official reports of the competition the Examiners remark that "The female figure modelled by Albert Power, of Dublin Metropolitan School of Art for which the Gold Medal has been awarded, is full of charm and faithful observation," and as regards the designs for Stained Glass, the Examiners report that they "are pleased to see the quite remarkable advance that has been made in this class of work. A Gold Medal has been awarded to Harry Clarke of Dublin Metropolitan School of Art, for a very remarkable effort in the highest class of Art, full of vigour and character, earnest feeling, richness of conception, and great resource in design and detail." Miss Kathleen Quigly's enamelled metal bowl, for which she was awarded a Silver Medal, is spoken of, "as a work which is remarkable for its broad and vigorous treatment and the massing of the design."

In the section of painting, the Examiners, in speaking of the Silver Medal Still Life groups by Miss Crilley and Mr. J. Slator, say that these works "are large in design, simple in treatment, and portraying fine objects suitable as exercises in still life painting."

In the sections of lace, crochet, and damask designing, there has been a noted improvement, in the last session; ten awards including Medals

and Book Prizes, were obtained for this class of work, by the students of this School.

Under the LOCAL PRIZE SCHEME for Session 1910-1911 prizes were awarded as follows:—

### I.—JUNIOR SECTION.

For the three students who gained the highest marks in the Junior Section (Day Class)—Alice Garland, Ethel Quigly, Phyllis Wilson.

For the three students who gained the highest marks in the Junior Section (Evening Class)—Kathleen G. Booth, Michael O'Brien, Wm. J. Saville.

On completion of Art Class Teachers' Certificate—Ernest Corr, Phoebe Curtis.

On completion of Irish Secondary Teachers' Drawing Certificate—Marjorie Findlater, Gladys Martin, William Smith.

### II.—DESIGN SECTION.

For the best sets of studies of Plants chosen with a view to and executed with appreciation of their decorative possibilities—Michael Drury, 1st; Eileen Elvery and Marjorie Findlater, 2nd, equal.

For the best set of Historical Studies in preparation for Design—Olive Cox.

For the best set of Designs for given subjects—Harry Clarke.

For Designs such as are required for Certificate Works, adapted to the technical requirements of various materials—Mary Lynch, 1st; Ernest Corr, 2nd.

For Designs for Lace—Bertha Dawes, 1st; Annie Kingston, 2nd.

For Miscellaneous Designs adapted to the technical requirements of various materials, etc.—Charlotte Lang, 1st; Wm. D. Smith, 2nd.

For Interior Decoration—Wm. D. Smith.

For the best set of notes and sketches in connection with Advanced Design Lectures—Jennie FitzHarris.

For the best set of notes and sketches in connection with the Elementary Design Lectures—Dorothy Acason.

### III.—ARCHITECTURAL SECTION.

Drawings to scale of the Classic Orders—Stephen C. Poole.

### IV.—DRAWING AND PAINTING SECTION.

For the best painting of a Figure subject from Irish History, Legend, Romance, etc., suitable for application as decoration for some Irish Public Building—Harry Clarke, 1st; Ernest Lakeman, 2nd.

For painting of the full length nude figure from Life—James Slator.

For painting of a Head from Life—Margaret Crilley.

For extremities from Life—Ethel Rhind.

For Time studies from the full length figure—James Slator.

For Anatomical studies and notes—Madeline D'Arcy.

For painting of an Antique Figure—Francis Bowe.

For painting of a Head from an approved cast—Augusta Binsted.

For drawing of an Antique Figure—Roddie Day.

Memory Drawings of Antique Figure—Roddie Day.

Drawings of a Head, Hand, and Foot, from approved casts—Dorothy Wilson.

Painting of an Interior—Kathleen Fox.

Painting of a Group of Still Life in Oil Colours—Margaret Crilley and James Slator, equal.

Painting of a Group of Still Life in Water Colours—Katherine Curtis.



## V.—MODELLING AND SCULPTURE SECTION.

Modelled Figure from Life (in the round)—Michael Drury.

Model of a Head from Life (in the round)—Albert Power.

Model of a Plant from Nature, etc.—Una Duncan and Ethel Stopford, equal.

Modelled monthly Designs—James O'Brien.

## VI.—CRAFT CLASSES.

Metal Work—Kathleen Fox.

Enamelling and Metal Work combined—Kathleen Quigly.

Stained Glass—Harry Clarke.

Leather—Jennie FitzHarris.

Gesso Work—Mary Lynch.

Count Plunkett, Director of the National Museum, for the third time, kindly offered two prizes for the best sets of studies from objects and examples of applied art in the Museum. The first prize in this competition has been awarded to Miss Helena Evans for a set of studies of historic embroideries, and the second prize to Miss Annie Holland, for a set of decorative lettering of various periods.

The following *TEACHERSHIPS-IN-TRAINING*, *ART SCHOLARSHIPS* and *SILVERSMITHS' (APPRENTICE) SCHOLARSHIPS* were renewed and awarded by the Department during the Session 1910-11:—

*Teacherships-in-Training*—Norah O'Kelly, Kathleen Quigly and James Slator (renewed).

*Art Scholarships*—Margaret Crilley (renewed), James J. O'Brien (Modelling), awarded, and Harry Clarke (Stained Glass) awarded.

*Silversmiths' (Apprentice) Scholarships*—Ralph Anderson, Michael Dunne, Wm. Phelan and Wm. Redfern (renewed).

Twenty-one Silversmiths' Apprentices attended the School for instruction in drawing and design as applied to their trade, whose progress was highly satisfactory.

The *BRANCHARDIERE TRUST SCHOLARSHIPS* for Lace and Crochet designing were awarded to Miss Olive Cox, and Miss Lizzie Conlon, who attended the School for instruction in these subjects. Their attendance and progress in drawing and designing were very satisfactory.

The *SUMMER COURSE* of Art Instruction for Teachers of Secondary Schools was held at the School during the month of July last, and was attended by seventy-nine Teachers. The Classes were under the supervision of the Headmaster assisted by Mr. Luke, Mr. Orpen, Mr. Sheppard, Mr. Power, Mrs. Barden, Miss Jacob, Miss Emerson, Miss Quigly, Miss O'Kelly, Miss Crilley, and Mr. Slator. These classes were highly successful, as proved by the industry and undoubted progress of the students, who appreciated the advantages offered to them by the Department for the improvement of their art knowledge, and for the experience they gained in methods of Art teaching.

The Department's Inspector, Mr. Patrick O'Sullivan, A.R.C.A., held an examination in Elementary Modelling and in Blackboard Drawing for the teachers attending the Summer Course.

*LANDSCAPE CLASSES* were conducted during the month of July by Mr. George Lynes, when the seventeen students who attended the classes made many interesting studies and sketches of buildings and scenes in and around Dublin and the District.

At the *ART INDUSTRIES EXHIBITION* of the Royal Dublin Society

twenty-five prizes were obtained by the students of the School for designs for Lace, Crochet, Metal Work, Enamelling, Stained Glass, Illuminating, etc.

In the Competition for the TAYLOR ART PRIZES three students of the School were successful, viz.—Miss Caroline Steen, who was awarded a £20 prize for a painted composition; Mr. L. Whelan, who obtained a £10 prize; and Mr. P. Tucky, who obtained two £5 prizes.

A new class in the subject of WOODCARVING has been formed at the School, which meets two days in the week, under the direction of Mr. A. Lang. It is well attended, and promises to be of great use to the students, and especially to those who are obliged to have a knowledge of the subject when applying for positions as Art teachers.

\* During the months of April and May last many of the students were engaged in the illumination of the Address to Her Majesty the Queen from the Women of Ireland, on the occasion of the Royal Visit to Ireland. The School was entrusted with the designing and illuminating of this important work by Her Excellency the Countess of Aberdeen and the Committee. The Address consisted of thirteen pages of illuminated decoration and lettering, and was designed in the Irish Celtic style of ornament. It is not too much to say that the book has been highly appreciated by Their Majesties the King and Queen, by Lady Aberdeen and her Committee, and has been admired by those who have seen it for its design and beauty of workmanship. I may say that we, at the Metropolitan School of Art, feel grateful that we have been allowed to do this important work, as it afforded us an opportunity of not only proving that our students can be useful in a practical way, but also of proving that the art of Irish illumination is not extinct, but on the contrary, is at present in a healthy and vigorous condition.

During the past session Mr. Orpen has offered prizes for pictorial compositions, which have been competed for by many of the students of the Life Classes, and a good deal of promising and interesting work has been produced.

The Headmaster gave a series of lectures on the colour decoration of public buildings, the lectures being illustrated by coloured lantern slides and diagrams, from many important historical palaces, cathedrals, and churches, and from other examples of decorative colouring.

I am pleased to say that we now appear to be within measurable distance of having the proposed new accommodation for our Craft Classes. The plans have been prepared and approved, and we hope the buildings will be ready for the beginning of the next session.

The Annual Exhibition of the Students' works was held during the Christmas vacation, and was well attended by the public.

I have to thank Mr. Luke, and all the members of the teaching staff, and also Mr. Tilly, the Registrar, for their able and willing assistance, given me at all times, which has largely contributed to the efficient and satisfactory position which the School continues to hold.

JAMES WARD,  
*Head Master,*

## SUMMARY OF THE DEPARTMENT'S ACTION IN CONNECTION WITH COMPLAINTS AS TO RATES CHARGED BY CARRYING COMPANIES FOR THE CONVEYANCE OF MERCHANDISE.

Complaint which was included in the Ninth Annual General Report of the Department, and in regard to which action was completed since the preparation of the Summary in the Appendices to the Tenth Annual General Report.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 29th May, 1909.—That while the rate for the conveyance of cream from Ballyhooley to Guildford, *via* Dublin and Holyhead and *via* Rosslare and Fishguard, was 4s. 3d. per cwt., the rate *via* Cork and Fishguard was 4s. 8d. per cwt.

On the 25th April, 1911, the rate of 4s. 3d. per cwt. was made to apply *via* Cork and Fishguard.

Complaint received previous to the 30th June, 1910, in respect of which action was not completed when included in the Summary printed in the Appendices to the Tenth Annual General Report.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 24th September, 1909, and 1st November, 1909.—That the rates for the conveyance of live poultry from Newmarket, Co. Cork, to Barry Dock, Cardiff, Newport (Monmouth) and Brynmawr were excessive.

Rates of 6s. 8d. per cwt. Company's Risk, and 5s. per cwt. Owner's Risk, were fixed to Barry Dock. The former rates were 9s. 4d. per cwt. Company's Risk and 5s. 10d. per cwt. Owner's Risk. The Companies were not prepared to make any alteration in the rates to Cardiff and Newport. Rates of 7s. 4d. per cwt. Company's Risk and 5s. 6d. per cwt. Owner's Risk were fixed to Brynmawr, the former rates being 9s. 4d. per cwt., C.R., and 5s. 10d. per cwt., O.R.

Complaints received during the period 1st July, 1910, to 30th June, 1911.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 6th July, 1910.—That the rates for the conveyance of butter from Killeshandra to Belfast, Leith, London, Southport and Wigan were excessive.

A through rate of 19s. 8d. per ton was put in operation for the conveyance of butter from Killeshandra to Belfast, the former rate being 20s. 9d. No reductions have been effected in the rates to Leith, London, Southport and Wigan.

GREAT NORTHERN RAILWAY CO. (IRELAND), LONDON AND NORTH WESTERN RAILWAY CO., 9th July, 1910.—That the charge—£1 7s. 2d.—made for the conveyance of a consignment of fireproof ceiling slabs sent from London to Cookstown was excessive, the weight of the consignment being only 11 cwt. 1 qr., and its value £2 6s.

The Department communicated with the Companies, who, however, did not see their way to reduce the charge. The charge was at the Class 1 rate, 48s. 4d. per ton.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 12th July, 1910.—That the rate for the conveyance of sulphate of copper from Dublin to Ballinrobe had been increased from 18s. 9d. per ton (the rate charged in 1909) to 24s. 6d. per ton.

Temporary reduced rates had been in force during the years 1907, 1908 and 1909 for the carriage over the lines of the Irish Railway Companies

of sulphate of copper intended for spraying purposes, but were not renewed in 1910. The Department communicated with the Companies as to the question of putting these rates in operation in the year 1910. The Companies, however, were not prepared to renew the rates.

(1) GREAT SOUTHERN AND WESTERN RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., AND DUBLIN AND SOUTH EASTERN RAILWAY CO.; (2) IRISH RAILWAY COMPANIES GENERALLY; (3) GREAT SOUTHERN AND WESTERN RAILWAY CO. AND MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 14th July, 1910.—(1) That rates which would include the cost of cartage should be issued in respect of furniture and bedding forwarded from Dublin to certain stations on the lines mentioned. (2) That the rates—Class 3—for the conveyance of straw paillasses were excessive when the value of the goods was taken into consideration, and that rates higher than Class 1 rates should not be charged for the traffic. (3) That the rates—Class 5 rates—charged for the conveyance of common deal furniture were excessive when the value of the goods was considered.

(1) The Department communicated with the Companies concerned, who did not, however, see their way to arrange for the issue of rates inclusive of cartage.

(2) The Great Northern Railway Co. and the County Donegal Railways Joint Committee arranged to charge Class 1 instead of Class 3 rates for the traffic. The Midland Great Western Railway Company reduced the rates from Class 3 to Class 1 from Dublin to all stations on their line except Athlone and Clara, and the Dublin and South Eastern Railway Company arranged to carry the traffic at Class 1 rates from Dublin to all stations on their line except Wexford, Waterford, New Ross and Palace East. The Great Southern and Western Railway Company, however, declined to fix reduced rates for the conveyance of the traffic over their line.

(3) On inquiry it was found that the Midland Great Western Railway Company had issued Class 4 rates for the traffic from Dublin to some thirty of the principal stations on their line, and were prepared to extend the list whenever traffic offered. The Department communicated with the Great Southern and Western Railway Company in the matter, but the Company were not prepared to make any reduction in the rates.

GREAT SOUTHERN AND WESTERN RAILWAY CO., LONDON AND NORTH WESTERN RAILWAY CO., NORTH STAFFORDSHIRE RAILWAY CO., 3rd August, 1910.—That a charge of  $\frac{1}{2}$ d. per lb. was made for the carriage of butter from Charleville to Sudbury near Derby by passenger train service, although a rate of  $\frac{1}{4}$ d. per lb. was in force from Charleville to places beyond Sudbury.

The Department had inquiry made in the matter. It appeared that a rate of  $\frac{1}{4}$ d. per lb. was in operation from Irish stations to five or six stations (which were competitive) on the North Staffordshire line. To other stations on the line the rate was  $\frac{1}{2}$ d. per lb. The matter is receiving attention.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 13th August, 1910, 23rd August, 1910.—That the rates—14s. 8d., 21s. 10d., 19s. 7d. and 12s. 8d. per ton—quoted for the conveyance of crab apples from Cahir, Carlow, Kilkenny and Tipperary respectively to Cork were excessive.

Reduced rates as follows were fixed, to remain in force until the end of 1910:—

	s.	d.
Cahir to Cork .. .. .	11	9 per ton.
Carlow to Cork .. .. .	17	6 ..
Tipperary to Cork .. .. .	10	2 ..

The reduced rates were re-issued for the season of 1911, and the rate from Kilkenny was reduced to 15s. 8d. per ton for the season.

DUBLIN AND SOUTH EASTERN RAILWAY CO., GREAT WESTERN RAILWAY CO., 17th August, 1910.—That the rates for the conveyance of dead meat from Macmine to London were excessive.

The rates in operation for the traffic *via* Rosslare were found to be:—Per passenger train service 4s. 6d. per cwt., Owner's Risk, minimum charge as for 1 cwt., and 4s. per cwt., Owner's Risk, minimum charge as for 1 ton; per goods train service 60s. per ton in 3 ton lots, and 65s. per ton in 1 ton lots. The consignor was forwarding the meat *via* Rosslare and Fishguard. He subsequently consigned the traffic *via* Dublin and Holyhead, and rates of 60s. per ton in 2 ton lots and 65s. per ton in lots under 2 tons including delivery in London were put in force by this route.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 24th August, 1910.—That, while new milk was formerly carried from Tullow to Dublin in any quantity at a rate of 1d. per gallon, a minimum of 12 gallons had been charged for since the rate was reduced to  $\frac{1}{2}$ d. per gallon, thus increasing the charges for senders of only 5 or 6 gallons per day.

It appeared that the minimum of 12 gallons had always applied to the conveyance of new milk, but that, in error, this minimum had not been charged for at Tullow. The error was discovered on the rate to Dublin being reduced from 1d. to  $\frac{1}{2}$ d. per gallon.

LONDONDERRY AND LOUGH SWILLY RAILWAY CO. AND OTHER COMPANIES, 9th September, 1910.—That the charges made for the conveyance of fish (herrings and ray) from Buncrana to Manchester and from Moville to Liverpool were excessive.

The question of having reduced rates fixed is receiving attention.

GREAT NORTHERN RAILWAY CO. (IRELAND), GREAT SOUTHERN AND WESTERN RAILWAY CO., 10th September, 1910.—That the Great Southern and Western Railway Co. had not complied with a request to quote a rate for the conveyance of cured herrings from Howth to Limerick.

A through rate of 16s. per ton for cured herrings in 6 ton lots, station to station, at Owner's Risk, was put into operation as a trial. The rate was re-issued, and is to apply up to the 30th June, 1912. The former rate was 23s. per ton, station to station.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 15th September, 1910.—That the charges made for the conveyance of butter from Lixnaw and from Waterford to St. Leonards-on-Sea were excessive.

The question of reduced charges is receiving attention.

GREAT SOUTHERN AND WESTERN RAILWAY CO., GREAT NORTH OF SCOTLAND RAILWAY CO., 17th September, 1910.—That the charges made for the conveyance of certain consignments of butter by passenger train service from Charleville to Ballater were excessive.

The Companies were unable to trace the consignments in respect of which complaint was made. Complainants were asked to furnish the railway receipts for the consignments. The receipts, however, were not supplied.

GREAT SOUTHERN AND WESTERN RAILWAY CO., GREAT NORTHERN RAILWAY CO. (IRELAND), 21st September, 1910.—That a through rate was not in operation for the conveyance of eggs from Foynes to Belfast *via* Dublin.

Through rates of 51s. 10d. per ton, Company's Risk, and 45s. per ton, Owner's Risk, station to station, were fixed for the traffic, the rates to remain in operation for twelve months.

GREAT NORTHERN RAILWAY CO. (IRELAND), GREAT SOUTHERN AND WESTERN RAILWAY CO., 22nd September, 1910.—That the rate—40s. per ton—for the conveyance of butter by goods train service from Dungannon to Cork was excessive.

The rate was reduced to 37s. 6d. per ton.

GREAT NORTHERN RAILWAY CO. (IRELAND), ISLE OF MAN STEAM PACKET CO., 22nd September, 1910.—That there was no through rate for the conveyance of eggs from Dungannon to Douglas, Isle of Man.

The Department communicated with the Great Northern Company in the matter, and were informed that the arrangement of a through rate was not feasible. It appeared that the traffic was small and was carried between Belfast and Douglas at a low rate, and that there was no regular service between Belfast and Douglas.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 26th September, 1910.—That head rates were not in operation for the conveyance of live pigs from Cahirciveen to Birmingham.

The Company stated that there was a truck rate of £8 4s. 6d. for the traffic between the places and that the traffic was usually forwarded at that figure. The Company added that they did not see the necessity for head rates.

DUBLIN AND SOUTH EASTERN RAILWAY CO. AND OTHER COMPANIES, 5th October, 1910.—That the charge—9s. 3d.—made for the conveyance of a consignment of moss weighing 2 cwt. 3 qrs. from Rathdrum to Nottingham was excessive.

The Department learned on inquiry that the Companies concerned could not see their way to put reduced rate in operation for goods train service.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE, GREAT NORTHERN RAILWAY CO. (IRELAND), 29th October, 1910.—That charges amounting to £2 16s. 1d. had been made for the conveyance from Glenties to Cookstown of 20 sheep.

The Department communicated with the Great Northern Railway Company in the matter, and instructions were given for a refund of 8s. 3d.

LONDON AND NORTH WESTERN RAILWAY CO., GREAT NORTHERN RAILWAY CO. (IRELAND), 31st October, 1910.—That the charge of 1s. 6d. made for the carriage from London to Lisnaskea of a parcel of garden seed, the weight of which was 8 lbs., was excessive.

It appeared on inquiry that the parcel was charged for as weighing 10 lbs. The cost of carriage from Euston Station to Lisnaskea was 1s., and 6d. was paid out by the contracting Railway Company in respect of cartage in London. For a parcel not exceeding 8 lbs. in weight the charge for conveyance from Euston Station to Lisnaskea would be 10d.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 2nd November, 1910.—That the rates—75s. 5d. per ton, Company's Risk, and 60s. per ton, Owner's Risk—for the conveyance of eggs from Clifden, County Galway, to Manchester were excessive.

Inquiry was made and the Department were informed that the Companies concerned would not agree to a reduction.

DUBLIN AND SOUTH EASTERN RAILWAY CO., 4th November, 1910.—That the charge—33½ per cent. added to the goods train charge—made for the conveyance of fat cattle by passenger train from Dublin to Macmine was excessive.

It appeared that in two instances complainant was charged for the conveyance of fat cattle by passenger train 33½ per cent. instead of 25 per cent. in addition to the goods train rate. The difference was refunded.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 17th November, 1910.—That the rate for the conveyance of dead poultry from Athlone to Bristol was excessive.

After correspondence the rate for the traffic by passenger train service was reduced from 5s. 10d. to 5s. per cwt. at Owner's Risk.

DUBLIN AND SOUTH EASTERN RAILWAY CO., 17th November, 1910.—That the rates for the carriage of holly from Rathdrum to Nottingham should be reduced.

It appeared on inquiry that there were no through goods rates in operation between Rathdrum and Nottingham. The Railway Company were, however, willing to apply the rates in force for the traffic from Wicklow to any consignments of holly that might pass between the places. These rates were : holly in cases, crates or hampers, 85s. 10d. per ton, not so packed 113s. 4d. per ton.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 19th November, 1910.—That a charge of 3s. 2d. had been made for the conveyance of a sample keg of butter from Devon Road to Worksop.

It appeared on inquiry that the weight of the consignment was 3 qrs. 14 lbs., and that the charge was made up as follows :—1s., a special charge for the carriage of packages not exceeding 1 cwt. in weight from Devon Road to North Wall, and 2s. 2d., the charge under the scale for small parcels, for conveyance from Dublin to Worksop.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND BELFAST AND COUNTY DOWN RAILWAY CO., 23rd November, 1910 ; 18th February, 1911 ; 20th May, 1911.—That as a result of competition between the Great Northern Railway Company (Ireland) and the Belfast and County Down Railway Company considerable reductions had been effected in the rates for the conveyance of goods between Castlereagan and Belfast, and that, as a consequence, much injury was being inflicted on traders, etc., in Dundrum and the surrounding districts and on traders in Banbridge.

After full investigation had been made by the Department in the matter it did not appear that the case was one which they should take up.

GREAT SOUTHERN AND WESTERN RAILWAY CO., GREAT NORTHERN RAILWAY CO. (IRELAND), LONDON AND NORTH WESTERN RAILWAY CO., CITY OF DUBLIN STEAMPAKET CO., 23rd November, 1910.—That through rates for the conveyance of horses from Nenagh to Belfast and other northern towns, and of sheep from Nenagh to Liverpool, were not in operation.

Through rates were, it appeared, in force for the conveyance of horses from Nenagh to Armagh, Ballybay, Belfast, Clones, Cookstown, Drogheda, Dungannon and Laytown, and the Great Southern and Western Railway Company were prepared to consider the question of arranging through rates to any other Northern stations to which such rates might be required.

There was a through rate of £5 6s. per truck in operation for the conveyance of sheep from Nenagh to Liverpool.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., GREAT SOUTHERN AND WESTERN RAILWAY CO., 23rd November, 1910.—That the rate—6s. per ton, Owner's Risk,—for the conveyance of eggs from Claremorris to London was excessive.

The Department communicated with the Midland Great Western Railway Company and the Great Southern and Western Railway Company in the matter. The question was submitted to a meeting of the associated Railway and Steamship Companies interested, who declined to agree to any reduction in the existing figure.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., LAIRD LINE, LIMITED, G. & J. BURNS, LIMITED, NORTH BRITISH RAILWAY CO., CALEDONIAN RAILWAY CO., 1st December, 1910.—That through rates were not in operation for the conveyance of eggs from Westport to Bellshill, Scotland.

The Department communicated in the matter with the Railway Companies concerned, and with the Scotch and Irish Traffic Conference. The Conference did not see their way to arrange through rates between the places. They stated that no saving in the total cost of conveyance

would be effected by the adoption of through rates, nor would traders obtain any advantage which they did not already possess.

G. & J. BURNS, LIMITED, LAIRD LINE, LIMITED, 5th January, 1911.—That the rate for the conveyance of vegetables from Dublin to Glasgow was excessive.

The Companies were not prepared to reduce the rate for the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 23rd January, 1911; 8th February, 1911.—That rates for the conveyance of butter in 2-ton lots from Bruce, Clonmel, Cork, Knocklong, Limerick, Listowel, Lixnaw, Newcastle West and Tralee to Cardiff were not in operation.

The Department were informed by the Great Southern and Western Railway Company that the question had been considered by the Companies concerned. The Companies were not prepared to make any reduction in the existing rates, which were stated to be exceptional rates for the traffic when sent in small or large consignments.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 30th January, 1911.—That the rate for the conveyance of eggs from Foynes to Dublin was excessive.

It appeared that the Company were not prepared to reduce the rate, 3s. 11d. per ton—station to station, which they considered reasonable.

LONDONDERRY AND LOUGH SWILLY RAILWAY Co., 3rd February, 1911.—That the charges made for the conveyance of empty fish boxes from Manchester to Buncrana were excessive.

The Department communicated with the Company in the matter, and were informed that a through rate of 1s. 2d. per cwt. had been arranged for the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 14th February, 1911.—That the rate—3d. per gallon—charged for the conveyance of new milk from Tipperary to Paddington was excessive.

A rate of 2½d. per gallon was fixed for the conveyance of the traffic at Owner's Risk, minimum as for 12 gallons.

MIDLAND RAILWAY (NORTHERN COUNTIES COMMITTEE), 22nd February, 1911.—That through rates were not in operation for the conveyance of live stock from Limavady to Cross-Channel stations.

The Committee stated that there were no through rates in force for the conveyance of cattle from any of their stations via Londonderry, and they did not see that such rates would be of any advantage.

It was further stated that the rehooking at Londonderry did not cause any inconvenience as the owners had to arrange for the driving of the cattle from the Railway stations to the steamers.

MIDLAND RAILWAY (NORTHERN COUNTIES COMMITTEE), 22nd February, 1911.—That an arrangement under which cattle had been conveyed from Antrim Fair to Limavady by passenger train at goods train rates had been discontinued.

The Department had inquiry made in the matter, and it appeared that, though some consignments had been conveyed by passenger train at goods train rates, the Northern Counties Committee were not prepared in future to forego the increased charge usual when a passenger train service was required.

DUBLIN AND SOUTH EASTERN RAILWAY Co., LONDON AND NORTH WESTERN RAILWAY Co., 3rd March, 1911.—That the rate charged for the conveyance of oysters from Gorey to Manchester was excessive.

The Department had inquiries made in the matter. The rate for the traffic was reduced from 4s. 3d. to 3s. 6d. per cwt., minimum 1 cwt., and the reduced rate was applied to the consignment in connection with which the complaint was made.



COUNTY DONEGAL RAILWAYS JOINT COMMITTEE AND OTHER COMPANIES  
11th March, 1911.—That through rates were not in operation for the conveyance of eggs from Donegal to Edinburgh.

Through rates were not in force for goods traffic from Donegal or other places in the North of Ireland to Edinburgh, and it did not appear that all the Companies concerned would agree to such rates being put into operation.

GREAT NORTH OF SCOTLAND RAILWAY CO. AND OTHER COMPANIES,  
14th March, 1911.—That the charges amounting to £5 3s. 11d., made for the conveyance of a bull from Old Meldrum, Aberdeenshire, to Castletownroche, Co. Cork, were excessive.

It appeared on inquiry that the charges made were in accordance with the regular scale. By order of the consignor the bull had been carried in a separate truck from Old Meldrum to Glasgow.

WEST CLARE RAILWAY CO., GREAT SOUTHERN AND WESTERN RAILWAY CO., MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 16th March, 1911.—That the charges made for the conveyance of cabbage plants from Miltown Malbay to Clifden were excessive.

It appeared that there were no through rates in force between the places, and that the charges amounted to about 34s. per ton. The Department communicated with the Companies concerned, and through rates of 32s. per ton, station to station, at Company's Risk, and 27s. 6d. per ton, station to station, at Owner's Risk, were fixed for the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES,  
22nd March, 1911.—That the rate—102s. per ton—charged for the conveyance of dead turkeys from Tralee to Blackburn was excessive.

It appeared that the rate by goods train service was 96s. 8d. per ton. The Department communicated in the matter with the Great Southern and Western Company and a rate of 87s. 6d. per ton, carted, was fixed for the conveyance of dead poultry by goods train service between the places *via* Dublin, Waterford, or Cork.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 29th March, 1911.—That a charge of £1 was made for the conveyance between Amiens Street and Kingsbridge of two bulls consigned from Kilscool to Cork.

The Department communicated in the matter with the Railway Company, and were informed that the charge made was for sending a special engine, van and guard to Amiens Street to convey the bulls to Kingsbridge and connect with the Company's train to Cork.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 31st March, 1911.—That the Owner's Risk rate—56s. 8d. per ton—for the conveyance of eggs from Roscrea to London was excessive.

The Company were not prepared to take action with a view to reduce the rate.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 1st April, 1911.—That the rates for the conveyance of early potatoes from Youghal to Buttevant, Charleville, Cork, Fermoy, Kanturk, Killarney, Limerick, Macroom, Mallow, Millstreet and Newmarket; from Youghal to Bristol, Cardiff, Liverpool, Manchester and Swansea; and from Youghal to Dundee, Edinburgh, Glasgow and Perth were excessive.

Special rates for the season ended 31st July, 1911, were arranged from Youghal to Charleville, Cork, Fermoy, Kanturk, Killarney, Limerick, Mallow, Newmarket and Manchester, and temporary reduced rates to Liverpool and Glasgow were made permanent.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 5th May, 1911.—

That a charge of £1 14s. 11d. was made for the conveyance of two bulls from Kilmorna to Cahirciveen.

An overcharge of 1s. 11d. appeared to have been made as the result of a clerical error. The amount was refunded.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 11th May, 1911.—That the rates for the conveyance of eggs from certain places in Ireland to Manchester were excessive.

The Companies concerned were not prepared to reduce the rates in force.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 17th May, 1911.—That the Owner's Risk rates for the conveyance of eggs from Maam Cross to Heysham (44s. 2d. per ton) and to Leeds (63s. 4d. per ton) were excessive.

The Companies concerned were not prepared to agree to the fixing of reduced rates.

GREAT NORTHERN RAILWAY CO. (IRELAND), LONDON AND SOUTH WESTERN RAILWAY CO., 31st May, 1911.—That the rate—7s. per cwt., minimum 1 cwt.—charged for the conveyance of dead poultry from Lurgan to Bournemouth was excessive.

The Department communicated with the Companies in regard to the matter, and the rate for the traffic was reduced to 6s. 6d. per cwt. (Owner's Risk) minimum 1 cwt.

GREAT NORTHERN RAILWAY CO. (IRELAND), 15th June, 1911.—That a charge of 1s. 11d. had been made for the conveyance of a basket containing 3 st. 5 lbs. of gooseberries from Newry to Belfast.

It appeared on inquiry that if the fruit had been consigned at Owner's Risk the charge would have been 1s.

GREAT NORTHERN RAILWAY CO. (IRELAND), MESSRS. G. & J. BURNS, LIMITED, CALEDONIAN RAILWAY CO., 15th June, 1911.—That charges amounting to 32s. had been made for the conveyance of two pigs in crates from Goragh Wood to Granton, Edinburgh.

On inquiry it appeared that the animals had been forwarded by passenger train, and that the charges were such as the Companies were entitled to make. Had the animals been conveyed by goods train service the total charge would have been considerably less.

GREAT NORTHERN RAILWAY CO. (IRELAND), BELFAST AND COUNTY DOWN RAILWAY CO., 15th June, 1911.—That the rate (12s. 6d. per ton) for the conveyance of cured herrings from Kilkeel to Belfast was excessive.

It appeared that the fish was conveyed from Kilkeel to Newcastle by motor and thence by rail to Belfast. The Department communicated with the Companies as regards the question of a reduction in the rate. A rate of 7s. 6d. per ton, station to station, Owner's Risk, was fixed for the carriage of the traffic in 5-ton lots and upwards over the railway portion of the journey, viz., between Newcastle and Belfast. The former rate for this part of the journey was 9s. per ton.

GREAT SOUTHERN AND WESTERN RAILWAY CO., GREAT NORTHERN RAILWAY CO. (IRELAND), 20th June, 1911.—That the rate of 38s. 8d. per ton for the conveyance of apples intended for cider-making from Co. Armagh to Cork was excessive.

It appeared that a rate of 30s. per ton was in force for the conveyance of apples in bags from Portadown and Annaghmore to Cork.

SUMMARY OF INQUIRIES MADE BY THE DEPARTMENT IN  
RECORD TO COMPLAINTS RECEIVED RESPECTING DELAYS  
IN THE CONVEYANCE OF MERCHANDISE BY CARRYING  
COMPANIES AND DAMAGE TO CONSIGNMENTS DURING  
TRANSIT.

Complaints received during the period 1st July, 1910, to 30th June, 1911.

CREAT CENTRAL RAILWAY Co., 22nd July, 1910.—That a consignment of 100 packages of butter, which had been shipped on the 18th July from Cork, and which arrived in London by the Great Central Railway, was, on delivery, found to be very much soiled by coal dust, the dust having penetrated the boxes.

The Great Central Railway Co. stated that portion of the consignment had been loaded for conveyance in a fruit van which had ventilators along the side, near the bottom only, and that it was therefore not considered necessary to use sheets. The Company added that a claim of £10 made in respect of the damage had been paid.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 22nd July, 1910.—(1) That five boxes of butter forwarded on the 15th April, from Lisarda, Co. Cork, to a firm in Dublin were not delivered to consignees. (2) That two boxes of butter—portion of a consignment of six boxes—forwarded on the 14th May, from Lisarda, Co. Cork, to a firm in Dublin, were not delivered to consignees.

(1) The Great Southern and Western Railway Co. expressed regret that the consignee's full address had been omitted from the invoice. The firm had more than one establishment in Dublin, and as a result of the omission referred to, the butter was delivered at a branch other than that for which it was intended. (2) The Great Southern and Western Co. stated that on the date on which the six boxes were forwarded to Dublin consignments of butter bearing the same marks, were consigned from Lisarda to the firm's branches in Galway and Ballina, and that two of the boxes for Dublin were sent to Galway in error and were delivered there. The Company added that had the boxes for the different branches of the firm been fully addressed there would have been no cause for complaint.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 23rd July, 1910.—That two boxes of butter forwarded on the 15th July, from Abbeydorney Station and Kilmallock Station respectively, for one of the Department's Surprise Butter Competitions, were in a damaged condition when delivered at the Royal Dublin Society's premises, Ballsbridge, Dublin.

The Great Southern and Western Railway Co. failed to ascertain how the damage complained of occurred.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 4th August, 1910.—That a consignment of 25 boxes of butter forwarded from Bruree, Co. Limerick, to London, was found on arrival at its destination on the 16th July, to be in a soft condition from heat, and that the boxes were much soiled.

Inquiries were made by the Department in regard to the matter, and it was found that the carrying companies had offered payment of £2 10s. in respect of the damage, and that the consignors had agreed to accept this amount.

LONDON AND NORTH WESTERN RAILWAY Co.: (1) 6th August, 1910; 12th August, 1910; 13th August, 1910; (2) 9th August, 1910.—(1) That dead poultry forwarded from Ireland via the London and North Western Railway Co.'s route, to the Central Market, London, were not delivered until 7.30 a.m., and were then late for the market. (2) That poultry sent

from Belmont and Gesshill (King's Co.) districts, *via* the London and North Western Company's route, to the Leadenhall Market, London, sometimes arrived late for the market.

The Department communicated with the London and North Western Railway Co. in regard to the matters. It was stated that, for some time, the Broad Street train had been running rather late on occasions, but that steps had been taken by the Company with a view to secure a better working.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO.,** 9th August, 1910.—That a box of butter—portion of a consignment of 40 boxes—forwarded on the 13th July from Waterford to London, was badly damaged in transit, and that a claim made in respect of the damage had not been met.

The Department were informed by the Great Western Railway Co. that a claim which had been made in respect of the damage had been met on the 10th August. Complainants subsequently stated that the matter had been settled to their complete satisfaction.

**DUBLIN AND SOUTH EASTERN RAILWAY CO.,** 17th August, 1910.—That a sufficiently expeditious service was not afforded for the conveyance of dead meat forwarded from Macmagine (Co. Wexford), *via* Rosslare to Smithfield, London.

The Department were informed subsequently that complainant was forwarding the traffic *via* Dublin and Holyhead. Consignments were, however, again sent *via* Rosslare. The question of the transit is receiving attention.

**GREAT NORTHERN RAILWAY CO. (IRELAND),** 26th August, 1910.—That eggs sent from Armagh to Manchester had been delivered in a damaged condition, and that the breakages principally occurred in consignments forwarded *via* Belfast.

The Department communicated in the matter with the Great Northern Railway Co., by whom action was taken as to the careful handling of the traffic at the Queen's Bridge Goods Station, Belfast.

**LANCASHIRE AND YORKSHIRE and LONDON and NORTH WESTERN RAILWAYS (Fleetwood Steamers); MIDLAND RAILWAY CO. OF ENGLAND (Heysham Steamers);** 5th September, 1910.—That poultry which reached Belfast Quays after 8 p.m. would not be accepted for shipment on the same night and had to wait over till the following night.

The Department communicated with the Shipping Companies concerned, and were informed that the Companies could not see their way to make any alteration in regard to the closing hour for receiving the traffic.

**GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES,** 6th September, 1910.—That, on the delivery, at Little Sutton near Chester, of consignments of eggs forwarded from Omagh on the 11th July (1 case), 1st August (2 cases), 29th August (1 case), and 6th September (1 case), a considerable number of eggs were found to be broken in each consignment, and twenty eggs were missing from one of the cases.

Claims made in respect of the damage to three of the consignments were met by the carrying companies concerned. As regards the remaining consignment the Department were informed that the Liverpool carting agents of the Belfast Steamship Company had agreed to pay in respect of the damage.

**CLYDE SHIPPING COMPANY; LONDON, BRIGHTON AND SOUTH COAST RAILWAY CO.,** 15th September, 1910.—That on the arrival at St. Leonards-on-Sea of a case of eggs forwarded from Waterford, 57 eggs were found to be broken and 30 eggs were missing.

The London, Brighton and South Coast Railway Co. stated that the

case was delivered to all appearance in good condition, that a clear receipt was given at the time of delivery, and that no complaint had been received from the consignee in regard to the matter.

LONDON AND NORTH WESTERN RAILWAY CO., 22nd September, 1910.—That certain claims made on the London and North Western Railway Co., in respect of damage to consignments of eggs sent from Donegal to London had not been settled.

The Department had inquiry made in the matter. The complainants subsequently informed the Department that the claims made had been settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 26th October, 1910.—That a box of oysters, which was forwarded on the 4th October from Oranmore to the Agents of the White Star Line at Queenstown for shipment on the SS. "Adriatic," on the 6th October, was not delivered to consignees in time for shipment.

The Department communicated with the Great Southern and Western Railway Co., who paid a claim in respect of the consignment. Steps were taken by the Company to secure the prompt delivery of any future similar consignments.

CORK AND MUSKERRY RAILWAY CO., 26th October, 1910.—That cans used for the conveyance of consignments of separated milk forwarded on the 1st and 6th August from Coachford to Castlemartyr were not returned to Coachford until the first week in October.

The Cork and Muskerry Railway Co. stated that the delay in the return of the empty cans was due to no arrangement having been made for payment for the transferring of the cans from the Great Southern and Western Railway Company's station at Cork to the Cork station of the Cork and Muskerry Railway Co. Complainant was so informed.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 2nd November, 1910.—That consignments, each consisting of 9 boxes of butter, forwarded on the 1st August and 8th August, from Ardagh, Co. Limerick, *via* Dublin and Holyhead to London, were not delivered until the 4th August and 11th August respectively.

The Great Southern and Western Railway Co. stated that owing to the volume of traffic to be dealt with, the goods trains arrived at Kingsbridge somewhat late on the 2nd and 9th August, that the consignments were sent forward to the London and North Western Railway Co. about 2 p.m. on these dates, and that the delay so far as they were concerned was unavoidable.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 5th November, 1910.—That, although complainants had made arrangements with a carter for the conveyance to their premises of consignments of butter forwarded to them at Limerick Station, consignments were handed to the Railway Company's carter for delivery, and that inconvenience and delay had been thereby occasioned.

It appeared that the question of delivery by the Railway Company at the premises of the consignees or the making of an allowance in lieu of such delivery was involved.

The Railway Co. stated that the butter was carried at "Station to Station" rates, and that prior to amalgamation the Waterford, Limerick and Western Railway Co. carted the traffic to consignees' premises free of charge. The Company also stated that they had never considered themselves bound to continue such free delivery, and held that it was purely a matter of grace for them to do so. They added that they had their own carting agents at Limerick, and, in the circumstances, were not bound to hand over the traffic to any other carriers for delivery.

GREAT WESTERN RAILWAY CO., 9th November, 1910.—That certain claims made on the London and North Western Railway Co., in respect of

damage to consignments of eggs sent from Kanturk to London had not been settled.

An Officer of the Department inquired into the matter, and it was understood that the claims were met.

LONDONDERRY AND LOUGH SWILLY RAILWAY Co., 11th November, 1910.—That the Board of Public Works had refused to sanction the alteration of the time of starting the second daily train from Burtonport from 10.10 a.m. to 12.15 p.m. during the winter season, an alteration which was considered most desirable in the interests of the fishing industry.

It appeared that the Burtonport Extension Railway was worked by the Londonderry and Lough Swilly Railway Co. under an agreement with the Treasury and the Board of Works, by which they were bound to "run daily as many trains as will fully meet the requirements of the passenger and goods traffic from time to time." The Board refused their sanction to the alteration on the grounds that serious inconvenience to the passenger traffic would result.

The Department communicated with the Londonderry and Lough Swilly Railway Co., in regard to the question of running from Burtonport, at a suitable hour, a special train to meet the requirements of the fish traffic, during, say, December and January, and from the middle of May to the middle of June. The Company stated that occasional specials could not be run on the short notice which those engaged in the fishing industry would be in a position to give.

The Department learned that the Londonderry and Lough Swilly Railway Co. had referred the matter to the Treasury for adjudication under the Treasury Agreement, and that the Treasury decision was to the effect that sufficient evidence had not been adduced to justify the alteration of the time table in the then existing circumstances.

CITY OF CORK STEAM PACKET Co., 17th November, 1910.—That a consignment of live poultry forwarded on the 1st November from Cork via the City of Cork Steam Packet Co.'s route to Liverpool was placed in an unprotected position on the main deck, with the result that out of a total of 385 geese and ducks, 45 were found to be dead when the consignment was unpacked.

The City of Cork Steam Packet Co. stated that the consignment was carried in a position where ample protection was afforded, and where, having regard to the packing of the birds, freedom from mortality could best be secured. An Inspector of the Department learned that unsuitable crates had been used in the packing of the consignment.

DUBLIN AND SOUTH EASTERN RAILWAY Co., AND OTHER COMPANIES, 18th November, 1910.—That consignments of goods forwarded from Enniscorthy to Newcastle-on-Tyne were damaged in transit, numerous packages being smashed and the contents injured by dirt.

The Department brought the complaint under the notice of the Dublin and South Eastern Railway Co., who made inquiries in the matter and took action with a view to securing that due attention was paid to the handling of the goods.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co. AND OTHER COMPANIES, 19th November, 1910.—That a sample keg of butter forwarded on the 4th November from Devon Road Station, Co. Limerick, via Dublin and Holyhead, to Worksop did not reach its destination until the 12th November.

The Great Southern and Western Railway Co. stated that the butter was handed to the London and North Western Railway Co. at North Wall on the 5th November. The London and North Western Railway Co. stated that the length of time occupied in transit from Dublin to Worksop was due to exceptional causes, and they expressed a hope that no such time would be occupied on any future occasion.

**CREAT SOUTHERN AND WESTERN RAILWAY Co.**, 28th November, 1910.—That the Great Southern and Western Railway Co. declined to accept for conveyance, by the evening train from Charleville, milk traffic consigned to London *via* Fishguard.

The Railway Co. regretted that they were unable to convey the traffic by the train—the Rosslare Express—as to do so would cause delay. The train, it appeared, was a fast passenger train, timed to reach Rosslare Harbour at 11.30 p.m. to connect with the night sailing for Fishguard.

**MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE)**, 2nd December, 1910.—That the Company had decided not to accept, after 11.15 a.m., perishable traffic for conveyance from Limavady to places in Great Britain, an arrangement which would make it impossible to fill orders for poultry on the date of receipt. Consignments could previously be forwarded, it was stated, by the 2.45 p.m. train for conveyance *via* Belfast and Heysham or Fleetwood, or by the 4.5 p.m. train for conveyance *via* Larne and Stranraer.

The Company stated that, with a view to meet the requirements of the Christmas traffic from Limavady, a wagon would, if necessary, be attached to the 3 p.m. train to connect with the 2.40 p.m. train from Londonderry, up to and including the 19th December, but that on the 20th, 21st, 22nd and 23rd December, the traffic would be forwarded by a special train for perishables leaving Limavady at 2.35 p.m.

From a letter, dated the 24th January, 1911, from complainant, it appeared that the arrangements made by the Company had proved satisfactory.

**CORK AND MACROOM DIRECT RAILWAY Co.; GREAT SOUTHERN AND WESTERN RAILWAY Co.; GREAT NORTHERN RAILWAY Co. (IRELAND); MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE)**, 13th December, 1910.—That four boxes of butter forwarded on 7th December, from Lissards, Co. Cork, to Carncoagh, Co. Antrim (Rathkenny Station), had not been delivered up to the evening of the 12th December.

On inquiry it appeared that the delay had occurred at Antrim station. The Midland Railway Co. (Northern Counties Committee) stated that the four boxes, not addressed, had arrived at Antrim Station (Great Northern Railway) on the 10th December, unentered. The invoice was not received till the 12th, when the butter was handed to the Midland Railway Co. (Northern Counties Committee) and forwarded to Ballymena, whence it was sent to Rathkenny Station on the following morning.

**WEST CLARE RAILWAY Co.; GREAT SOUTHERN AND WESTERN RAILWAY Co.**, 15th December, 1910, 6th April, 1911.—That delay in the conveyance of butter, forwarded from Kilrush to Cork, was occasioned by the refusal of the West Clare Railway Co. to accept consignments for conveyance by the train leaving Kilrush at 5.35 p.m.

The Department communicated with the Companies concerned. It appeared that, with the exception of consignments obtained in the Kilmihil district, the butter purchased by complainants in the vicinity of Kilrush could be delivered at Kilrush station in time for conveyance by the 2.10 p.m. train. Arrangements were made to carry consignments from Kilmihil district by the 5.35 p.m. train from Kilrush—the consignments reaching Cork early the following morning. Subsequently it was learned that consignments sent by the 5.35 p.m. train from Kilrush were frequently not transferred at Ennis in time to catch the 8.35 p.m. train for Cork, and with a view to quick transfer it was suggested that such consignments should be specially marked and separately consigned.

**GREAT SOUTHERN AND WESTERN RAILWAY Co.**, 16th January, 1911.—That consignments of coal forwarded in six-ton wagon loads from Limerick to Ballina, Killaloe, were found on arrival to be from 3 to 6 cwt. short in each wagon.

The Great Southern and Western Railway Co. stated that occasional

tests of the weight of consignments had been made, and that there had been discrepancies as between the weight shown by the Company's machine at Limerick and that shown by the consignee's machine at Ballina. In the case of one consignment, which was kept under observation during conveyance, the weights respectively were 6 t. 0 c. 1 q. 16 lb., and 5 t. 18 c. 3 q. 21 lb.

From a letter subsequently received from complainant it appeared that the shortage was less marked.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LONDON AND NORTH WESTERN RAILWAY Co., 17th January, 1911.—(1) That in a consignment of eggs—consisting of 20 cases—sent on the 6th June from Loughrea to Golborne, one case was found on arrival to be badly damaged and was refused by consignee. (2) That two cases of eggs—portion of a consignment of 20 cases—forwarded on the 11th June from Loughrea to Golborne, were found on arrival to be badly damaged, and were refused by consignee.

(1) The Midland Great Western Railway Co. stated that two of the cases were found to be leaking when received from the sender at Loughrea, and that the case refused by consignee was salvaged by the London and North Western Railway Co. and the amount tendered to sender. The eggs were conveyed at Owner's Risk rate. (2) The Midland Great Western Railway Co. stated that the consignment was in apparently good order when handed to the London and North Western Railway Co. The London and North Western Railway Co. stated that they were unable to say where the damage occurred, that the cases refused by consignee were salvaged, and that the amount realised together with one-half the net loss was offered to consignor. The eggs were conveyed at Owner's Risk rate.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 20th January, 1911.—That there were no arrangements for the delivery of stationery—sent from Athboy—at Blanchardstown station.

The Midland Great Western Railway Co. stated that Blanchardstown Station was a passenger station only, and had no accommodation for goods traffic, but that as the goods in question were not weighty, and could be handled and forwarded by passenger train, instructions had been given that consignments from Athboy to Blanchardstown should be carried by passenger train at a reduced rate of 1s. per cwt. at Owner's Risk, with a minimum charge of 6d. per consignment.

MIDLAND RAILWAY Co. (NORTHERN COUNTIES COMMITTEE), 24th January, 1911.—That the Company would not accept live fowl for conveyance from Limavady to Glasgow via Londonderry by any train later than the 11.40 a.m. train, although the steamer for Glasgow rarely left Londonderry before 7 p.m.

The Company stated that on Mondays (Limavady market) a train, available for the conveyance of the traffic at goods train rates, left Limavady at 2.20 p.m., and that on other days consignments could be forwarded by a corresponding train which left Limavady at 11.35 a.m., or at passenger train rates, by the train leaving at 3 p.m.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 26th January, 1911.—That the Railway Company's officials at Ballina Station marked consignments of eggs "leaking" and "open to pillage," whether such was the case or not. The complainant stated that he had one consignment which was marked "leaking" unpacked in the presence of a London and North Western Railway official, but did not find a single broken egg.

The Department had inquiry made in the matter, but it did not appear that there had been any indiscriminate marking of consignments as "leaking" or "open to pillage."

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 31st January, 1911.—That a box of butter handed to the Company at Boyle Station on



the 5th December, for conveyance to Dublin for one of the Department's Surprise Butter Competitions, did not reach its destination until 6.30 p.m. on the 8th December, not having been forwarded from Boyle station until the 6th December, and being then despatched by goods train.

The Department communicated with the Company in the matter. The Company replied that the butter was consigned by goods train and expressed regret that through an oversight it was not forwarded from Boyle until the 6th.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 31st January, 1911, 1st and 3rd February, 1911.—That in a half case of eggs forwarded from Bagenalstown *via* Dublin and Holyhead to Manchester, 54 eggs were found on delivery to be broken.

Consignor, who was interviewed on behalf of the Department, stated that he had heard nothing as to the damage complained of; he therefore assumed that any claim made in the matter had been met. Consignment had been forwarded at Company's Risk rate.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; CITY OF DUBLIN STREAM PACKET Co., 1st February, 1911.—That there were continual breakages in consignments of eggs forwarded by a trader in Galway to complainants at Manchester.

In May the consignor informed an Inspector of the Department that there had been an improvement in the transit and that very little breakage was then occurring.

GREAT WESTERN RAILWAY Co., 2nd February, 1911.—That a consignment of 12 hhd. eggs which were packed with good straw in a new long case specially made on consignor's premises was badly damaged in conveyance from Waterford to Birmingham.

The Department communicated with the Great Western Railway Co. in the matter, and a claim made in respect of the damage was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 3rd February, 1911.—That a 56 lb. box of butter forwarded on the 29th June, 1910, from Charleville to Blackpool by passenger train service at Owner's Risk rate, was lost in transit, and that a claim made in respect of the butter—£3 10s.—was not met, the Railway Co. offering only half that amount in full settlement.

The Great Southern and Western Railway Co. were unable to prove delivery of the butter, and agreed to pay £3 in respect of the loss sustained. The offer was accepted by complainants.

LONDONDERRY AND LOUGH SWILLY RAILWAY Co.; MIDLAND RAILWAY (NORTHERN COUNTIES COMMITTEE), 3rd February, 1911.—That of 20 barrels of herrings forwarded on 1st February from Buncrana to Manchester, six were not delivered until 2.30 p.m. on the following day, being then late for market.

The Londonderry and Lough Swilly Co. stated that 14 of the barrels were forwarded by the 11.36 a.m. train from Buncrana, and that the other 6 barrels, which were not handed to them in time for that train, were forwarded by the 12.30 p.m. train.

The Midland Co. (Northern Counties Committee) stated that the 14 boxes were despatched from Londonderry *via* Larne and Stranraer by a special train leaving at 2.30 p.m., and that the remaining 6 boxes, which were received too late for forwarding by this train, were despatched from Londonderry *via* Belfast by the 4 p.m. train.

GREAT WESTERN RAILWAY Co., 7th February, 1911.—That a package of eggs forwarded on the 4th February from Waterford to Handsworth, Birmingham, was badly damaged in transit and was in consequence refused by the consignee.

The Department communicated with the Great Western Railway Co. in the matter, and a claim in respect of the consignment was met.

MIDLAND RAILWAY CO. (NORTHERN COUNTING COMMITTEE), 17th February, 1911.—That 36 eggs were smashed and 42 cracked, during conveyance, in a consignment (two 6 hhd. cases) forwarded on 14th February from Ballymoney Station to Plumstead.

Inquiry failed to show that the consignment received any rough handling during conveyance. The eggs were apparently signed for by consignee without remark.

GREAT NORTHERN RAILWAY CO. (IRELAND), 17th February, 1911.—(1) That in two 6 hhd. cases of eggs sent on 18th January from Carrickmacross Railway Station to Dublin, it was found that on arrival 15 doz. of the eggs were broken or missing. (2) That in three 6 hhd. cases of eggs sent on 20th January from Cootehill to Dublin, it was found on arrival that 88 eggs were broken or missing.

(1 & 2). The Department communicated with the Railway Co. in the matter. A claim in respect of the damage to the consignments was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 20th February, 1911.—That although a goods train left Foynes Railway Station at 4.30 p.m., consignments of eggs delivered at the station after 3 p.m. were held over until the following day.

The Great Southern and Western Railway Co. stated that they had had inquiries made in the matter, but they regretted that it could not be arranged to accept goods for forwarding later than 3 p.m.

GREAT NORTHERN RAILWAY CO. (IRELAND), 23rd February, 1911.—That an arrangement by which traders in butter and eggs in Pomeroy and Dungannon districts had been allowed to leave over their goods for a few hours or a day at the Great Northern Railway Company's stations had been discontinued by the Company.

The Railway Company stated that they had received a memorial from several butter and egg merchants attending Dungannon and other markets, suggesting that the Company should allow egg traffic to be delivered at certain stations to the order of the senders who would forward disposal instructions on the following day. The Company agreed to a trial of the proposal; the eggs to remain on their hands at Owner's Risk.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 2nd March, 1911.—(1) That, in a case of honey forming part of a consignment forwarded from Ballyragget to Dublin, and received by consignees on the 16th February, 17 sections were found to be smashed. (2) That 24 sections of honey were badly damaged during conveyance in a case forwarded by passenger train service from Ballindine to Dublin and delivered on the 21st February.

The Department communicated with the Great Southern and Western Co. in regard to the consignments, and were informed: (1) that the case was conveyed at Owner's Risk, and that a claim in respect of the loss sustained had been accordingly declined; (2) that the consignment was received from the sender in a leaking condition, and was delivered in the same condition to the consignees.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 9th March, 1911; 20th March, 1911.—(1) That consignments of eggs forwarded from Woodlawn to St. Helens on Wednesday, did not arrive until the Saturday following. It was stated that a consignment forwarded on Wednesday, the 1st March, was not delivered until Saturday afternoon, too late for that week's market, and that a loss of 6d. per hhd. resulted.

(2) That a consignment forwarded on the 14th March had not reached its destination up to the 17th March.

The Department communicated with the Midland Great Western Railway Co. in regard to the conveyance of the consignments. (1) The Company stated that the consignment was handed to the City of Dublin Steam Packet Co. at noon on the 2nd March, and to the London and North Western Railway Co. on the 3rd March, and was delivered, the London

and North Western Railway Co. stated, at 6 a.m. on the morning of the 4th March.

(2.) The Company expressed regret that on the occasion their train was running late and did not reach North Wall in time for the shipment of the eggs by the noon boat on the 15th March. The eggs were shipped by the 7.30 p.m. boat.

The Department understand that the Company took steps to have the service improved.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 10th March, 1911.—That, though arrangements had been made by complainant with the Station Master at Westport for the provision of a horse-box for the conveyance of a stallion from Westport to Castlebar by the 2 p.m. train on the 9th March, the only horse-box available when the animal was brought to the station was one in which there was another stallion, the owner of which, as well as complainant, objected to the animals being placed in the same box. In consequence it was not possible to parade the complainant's horse at a show which was being held at Castlebar on the date in question.

The Railway Co. stated that when applying for a horse-box to their agent at Westport, neither the complainant nor the owner of the other stallion stated that his animal was a stallion, and it was assumed that the two animals could be conveyed in one horse-box.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LONDON AND NORTH WESTERN RAILWAY Co., 18th March, 1911.—That eggs sent from Athlone on Saturday evenings to places in England via Holyhead were delayed in conveyance. The following were mentioned as specific instances: (1) That 10 cases forwarded on Saturday, the 11th February, to Liverpool, did not reach their destination until mid-day on the 14th February, a loss of £2 resulting. (2) That 13 cases forwarded on Saturday, the 11th March, to Newcastle-on-Tyne, were not delivered until the 16th March.

It appeared from the inquiries made in the matter that neither consignment was handed to the London and North Western Railway Co. at North Wall in time for the Sunday boat, and that the Newcastle-on-Tyne consignment met with some delay, owing to exceptional causes, while in the hands of that Company. Arrangements were made by the Midland Great Western Co. to run a special train on Saturday evenings to catch the Sunday sailing from North Wall.

Complainants writing to the Department on the 4th August, stated that the defects in the service for consignments sent on Saturday evenings had been remedied.

COUNTY DONEGAL RAILWAYS JOINT COMMITTEE; MIDLAND RAILWAY OF ENGLAND, 20th March, 1911.—That 8 cases of eggs forwarded on Saturday, the 11th March, from Donegal to London, were not delivered until the following Wednesday.

The Department communicated with the County Donegal Railways Joint Committee in regard to the transit of the consignment, and were informed that the consignment was delivered on the morning of Tuesday the 14th March, no delay in transit having occurred.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; GREAT SOUTHERN AND WESTERN RAILWAY Co., 25th March, 1911.—That a consignment of 84 pigs forwarded on the 13th December, 1910, from Ballyhaunis to Cork, did not reach their destination until the forenoon of the 15th December.

The Midland Great Western Co. stated that at the time they were very much pressed for wagons owing to exceptionally heavy goods and live stock traffic, that they were unable to despatch the special train for the Ballyhaunis pig fair from Ballyhaunis until 4.45 p.m., and that the consignment in respect of which complaint was made reached Athlone at 7.35 p.m.

The Great Southern and Western Co. stated that the consignment was

transferred to them at Athlone after the night goods train had left, and that the pigs were forwarded on the following day by passenger train from Athlone to Portarlinton, so as to connect with the first goods train from Dublin to Cork on that date. The Company added that a more direct route for the traffic would have been *via* Athenry and Ennis—the consignment had been conveyed *via* Athlone and Portarlinton at sender's request—and that action had been taken with a view to having a through rate for the traffic *via* that route put into operation.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 19th April, 1911.—That eggs purchased at Moate Market (Thursday) and forwarded to Leeds, were not delivered until Monday or Tuesday, and that the service for the traffic would be improved if consignments were conveyed from Moate on Friday mornings by the Ballina or Galway goods train, thus reaching North Wall, Dublin, in time for mid-day boat.

The Department communicated with the Midland Great Western Co. in the matter. The Company carefully considered the question of stopping one of the trains at Moate on Friday mornings, but regretted that they could not see their way to do so.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; CITY OF DUBLIN STEAM PACKET Co.; LONDON AND NORTH WESTERN RAILWAY Co., 20th April, 1911.—That 12 cases of eggs forwarded on the 11th April from Woodlawn *via* Dublin and Liverpool, to St. Helens, Lancs., were not delivered until the 18th April, thus missing the Easter Market, and that, owing to the consignment not having been delivered on Thursday or Saturday, certain arrangements for the sale of the eggs had to be cancelled, with the result that a loss was incurred.

The Department communicated with the Midland Company in the matter. A claim made by the consignor was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co., 25th April, 1911.—That a consignment of butter sent from Cork to Clifden was delayed in transit.

The Department asked complainant to state the dates on which the consignment was forwarded and delivered. No reply was received.

G. AND J. BURNS, LIMITED; LAIRD LINE, LIMITED, 26th April, 1911.—That the trade in vegetables from Dublin to Glasgow had decreased owing to defective arrangements for conveyance.

The Department communicated with the Companies and made inquiry in the matter. It appeared that the decrease in the traffic from Dublin was due to an increased supply being available in Scotland. The Companies stated that the consignments carried by them were conveyed with due expedition.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 2nd May, 1911.—That a package of butter forwarded on the 21st April from Cork to Ballinrobe, was not delivered until the 25th April.

The Great Southern and Western Railway Co. stated that the delay was due to the connections at Ennis and Claremorris not having been made. The Company also informed the Department that they were putting on a new goods train between Ennis and Athenry, which would considerably improve the service for traffic between Cork and stations west of Claremorris.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 4th May, 1911.—That the arrangements for the conveyance of eggs by goods train service from Abbeylax to London were in need of improvement.

The matter is receiving attention.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 4th May, 1911.—That in four 6 hhd. cases of eggs—portion of a consignment of 14 cases forwarded from Kilgarvan, Co. Kerry

*via* Dublin and Holyhead to Manchester—it was found on delivery that 3 hhd. eggs were broken or missing.

The Department had inquiries made in regard to the conveyance of the consignment. It appeared that the eggs were forwarded at Owner's Risk rate. The London and North Western Co., however, offered to pay half the amount—25s. 8d.—claimed in respect of the loss sustained.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 9th May, 1911.**—That horses loaded at Thurles Station about 12 noon on the 2nd May (Thurles Fair) for conveyance to Waterford, were detained in the wagons, without food or drink, in rainy weather, until 7.30 the following morning when they were delivered.

It appeared that the horses—two wagon loads—which were booked at goods train rate, were despatched from Thurles at 3.58 p.m., and were watered at Clonmel, where they remained till 2.40 a.m., awaiting train connection with Waterford. The animals reached Waterford at 4.20 a.m. but the owners did not arrive to take delivery till 7 a.m. It appeared that the Company were prepared to despatch a special through train for live stock from Thurles to Waterford on the date in question, but that sufficient traffic did not offer. Arrangements were made by the Company to have horses sent from Thurles Fair to Waterford conveyed, if delivered to them in time, by the 12.5 p.m. train which was timed to arrive at Waterford at 3.20 p.m.

**MIDLAND RAILWAY CO. (NORTHERN COUNTIES COMMITTEE), AND OTHER COMPANIES, 12th May, 1911.**—That heavy breakages occurred in consignments of eggs forwarded by complainant from Ballymoney.

An Inspector interviewed complainant, who was unable to supply specific instances of consignments which were damaged during conveyance.

**LONDON AND NORTH WESTERN RAILWAY CO., 17th May, 1911.**—That butter was abstracted during conveyance from parcels forwarded from Lismore *via* Dublin and Holyhead to places in England.

The London and North Western Railway Co. stated that the traffic was being specially looked after whilst in transit over their system.

**GRAND CANAL CO., 23rd May, 1911.**—That a consignment of eggs sent from Rossmore to Limerick was delayed in transit, and that breakage and pilferage occurred during conveyance.

Subsequently the complainant informed the Department that legal proceedings had been instituted in the case. Complainant was awarded £2 8s. in respect of damage to the consignment and pilferage, together with £1 8s. costs.

**COUNTY DONEGAL RAILWAYS JOINT COMMITTEE AND OTHER COMPANIES, 29th May, 1911.**—That certain consignments of eggs sent from Donegal to London and to Leeds were damaged in transit.

The Department communicated with the Committee in the matter. The Committee stated that when one of the consignments was handed to them at Donegal one of the cases was leaking. Claims made in respect of the other consignments were met.

**MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 1st June, 1911.**—That when a crate of live fowl forwarded from Hollymount, Co. Mayo, to London, reached its destination on the 22nd March, three of the birds were found to be dead, that five were unable to stand, and that the remainder were badly bruised.

The Department brought the matter under the notice of the Companies and a claim (13s. 9d.) in respect of the damage was met.

**MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 3rd June, 1911.**—That the Company would not convey by the 1.30 p.m. train from Clifden, mackerel consigned from Clifden to Sheffield.

The Company stated that they could not see their way to carry mackerel traffic by the Up Limited Mail (1.30 p.m. train from Clifden), as it was a traffic which was forwarded in large quantities, and its conveyance would seriously interfere with the running of the train.

**GREAT NORTHERN RAILWAY CO. (IRELAND), 5th June, 1911.**—That two wagons of store cattle which were forwarded on the 28th March from Kilkenny to Kells, and transferred to the Great Northern Railway Co. at Dublin before 8 p.m. that evening, did not reach their destination until 4 o'clock next morning, although an undertaking had been given on behalf of the Great Northern Co. to have the cattle at Kells at 11 p.m. on the date of despatch, that on arrival one of the beasts was found to be dead, and that a claim for £12 compensation had not been met.

The Great Northern Railway Co. stated that on the date in question they received at Dublin from the Great Southern and Western Railway Co. 38 wagons of cattle from the Kilkenny fair to be forwarded to several stations on their system, that the wagons reached them in a mixed condition and could not be properly shunted at Dublin, whence they were forwarded at about 8 p.m., that delays consequently occurred at certain stations, and that the two wagons reached Kells at 3.25 a.m. The Company added that, in the circumstances, a better service could not have been given, and that there was no undertaking that the cattle would be at Kells at any specified time.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 5th June, 1911.**—That a wagon of cattle sent on the 9th December, from Kilmallock to Trim, was delayed in transit, and that a claim of £28 5s. in respect of depreciation in value, loss of an animal, and expenses consequent on the delay, was not paid.

The Great Southern and Western Railway Co. stated that there had been a mistake in the booking of the cattle, whereby their destination was given as Dublin instead of Trim, that the animals were properly cared during two days detention at Dublin, and that a sum of £8 had been offered by the Company in respect of the disappointment and expense occasioned.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 5th June, 1911.**—That cattle, which were forwarded from Westport to Geashill, and which were transferred to the Great Southern and Western Company at Athlone at 7.55 p.m. on the 22nd May, were not ready for delivery at Geashill until 11.30 p.m. on the 23rd May.

It appeared that there was only one goods train daily from Athlone to Geashill, and that it left the former station at 6.50 p.m. The cattle which were forwarded at goods train rate, were not therefore despatched from Athlone until the 23rd.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 14th June, 1911.**—That the Great Southern and Western Railway Company's station-master at Valentia had, on the 14th June, refused to accept, for conveyance by the 4.20 p.m. train, a consignment of fish tendered by the complainant at 3.50 p.m., and that complainant had only succeeded in having his fish forwarded by the train on his pointing out to the station-master that a consignment from another trader had been accepted subsequent to 3.50 p.m.

The Department communicated with the Company, and were informed that the consignment in question consisted of 24 boxes (4 for local and 20 for Cross-Channel stations), that 10 of the boxes were not tendered until 4.15 p.m., although the train was due to depart at 4.30 p.m., that the consignments from other traders were delivered to the Company before 3.30 p.m., and prior to the commencement of the necessary shunting operations, and that notwithstanding the late delivery the 10 boxes were forwarded by the train. It appeared that the Company's instructions were that fish traffic was to be accepted at the station for conveyance up to as late an hour as practicable.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 16th JUNE, 1911.—That six 56-lb. boxes of butter forwarded on Saturday, the 10th June, from Carrrowmore Station, Co. Sligo, to Liverpool, were not delivered until Wednesday, the 14th, and that consignments sent on Saturday evenings from the station to Lancashire towns, including Liverpool, were seldom delivered before Tuesday.

The Department communicated with the Great Southern and Western and Midland Great Western Railway Companies. It appeared that the consignment mentioned reached North Wall on Sunday morning, 11th June, but that the wagon in which it was loaded was not "carded" through to the London and North Western Company's yard, with the result that the butter missed shipment by the London and North Western Railway Company's Sunday boat. Arrangements were made by the Companies to secure that wagons containing butter forwarded to Cross-Channel destinations from stations on the Great Southern and Western Railway Company's line, *via* the Midland Great Western and London and North Western Railways would be "carded" through to the London and North Western Railway Company's yard in Dublin.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 16th JUNE, 1911.—That the Company had refused to accede to an application by complainants, to have consignments of butter purchased by them on Thursday, 22nd June, at market towns on the Company's system, forwarded to Cork by passenger trains running on Thursday [Coronation Day], or where there were no such trains available after the markets on Thursday, by the earliest passenger trains on Friday.

It appeared that the Company had had so many applications to convey the traffic by passenger train on Thursday that they felt bound to adhere to a public notice which they had given to the effect that such traffic would not be carried by passenger train on the occasion. As regards Friday the Company considered that their passenger trains would not be able to cope with the traffic, and had declined therefore to carry it by passenger train service on that day.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 19th JUNE, 1911.—That the Company had intimated that they would not convey by the passenger train on Monday morning stock forwarded from Cloughjordan for the Royal Dublin Society's Winter Show.

The Company stated that they could not arrange to convey the stock by the 7.20 a.m. passenger train from Cork (the train in question) which had connections to make for the Kingstown steamer. The Company also stated that the stock could be forwarded by a train leaving Cloughjordan at 9.26 a.m. and due in Dublin at 4.45 p.m.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 30th JUNE, 1911.—That a half case of eggs forwarded on the 19th June from Waterford, *via* Rosalare to Herne Hill, London, was not delivered until the 28th June, and that then 200 eggs were found to be broken and 50 were missing.

The Department communicated with the Companies in the matter. No information was, however, obtained as to how the injury to the consignment occurred. The question of meeting a claim has not it appears been settled.

## SALE OF FOOD

I.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,  
ACTS IN THE COUNTIES

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken	No. of Prosecutions.
Antrim.	67	1	1	£ s. d. 0 10 6	1	—
Armagh.	133	—	—	—	4	—
Carlow.	39	—	—	—	—	—
Cavan.	100	2	2	0 15 6	—	—
Clare.	243	5	5	2 11 1	1	—
Cork.	608	43	42	30 13 3	1	—
Donegal.	153	—	—	—	3	—
Down.	110	—	—	—	7	—
Dublin.	301	—	—	—	10	1
Fermanagh.	25	—	—	—	—	—
Galway.	121	8	8	6 3 6	—	—
Kerry.	264	16	12	3 10 4	1	—
Kildare.	62	—	—	—	2	—
Kilkenny.	82	—	—	—	—	—
King's.	86	2	2	0 15 0	7	1
Leitrim.	57	—	—	—	—	—
Limerick.	186	5	3	2 9 0	—	—
Londonderry	26	—	—	—	—	—
Longford.	42	—	—	—	—	—
Louth.	78	—	—	—	—	—
Mayo.	65	1	1	0 12 6	6	—
Meath.	62	1	1	0 13 6	3	—
Monaghan.	31	1	1	0 1 0	—	—
Queen's.	106	1	1	0 13 6	—	—
Rosecommon	54	—	—	—	—	—
Sligo.	20	—	—	—	—	—
Tipperary (N.R.).	145	4	4	2 19 0	—	—
Tipperary (S.R.).	101	3	3	1 14 1	6	—
Tyrone.	101	—	—	—	—	—
Waterford.	146	5	5	1 11 0	—	—
Westmeath.	120	—	—	—	2	—
Wexford.	26	—	—	—	—	—
Wicklow.	109	—	—	—	1	—
Total.	3,869	98	91	55 12 9	55	2
Total for Year 1909	4,302	104	94	60 9 2	68	8

One sample of Margarine-Cheese was taken in Co. Antrim during the period. There was no infringement of the Acts in regard to the sample.



## AND DRUGS ACTS.

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER THE DURING THE YEAR 1910.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	38	141	9	7	3 9 0
—	—	23	69	8	8	7 4 7
—	—	1	16	3	1	0 9 4
—	—	16	65	5	5	1 7 7
—	—	2	131	1	—	—
—	—	5	667	54	40	29 0 6
—	—	62	115	4	3	0 19 0
—	—	83	135	8	6	5 9 6
1	2 0 0	32	902	32	28	69 3 0
—	—	—	28	3	3	4 18 6
—	—	11	214	7	6	13 9 6
—	—	8	139	9	7	6 17 3
—	—	2	65	—	—	—
—	—	3	86	—	—	—
1	0 3 1	18	53	—	—	—
—	—	14	44	2	2	2 18 6
—	—	3	373	7	5	2 8 6
—	—	13	15	—	—	—
—	—	8	62	3	3	1 7 6
—	—	1	29	3	3	0 8 6
—	—	4	130	13	10	5 5 6
—	—	26	29	—	—	—
—	—	5	15	2	2	2 5 0
—	—	12	72	1	1	0 13 0
—	—	6	89	6	5	2 7 6
—	—	3	19	2	2	1 16 6
—	—	18	131	1	1	1 2 7
—	—	3	347	14	9	5 13 6
—	—	54	97	5	5	4 10 0
—	—	2	123	1	—	—
—	—	32	204	4	4	6 6 0
—	—	1	36	—	—	—
—	—	19	80	1	1	0 6 6
2	2 3 1	528*	4,721	298	167	179 16 19
7	14 2 0	583†	5,232	241	204	252 4 3

\* No proceedings were instituted in respect of any of these samples.

† Proceedings in one case in Co. Antrim. Case was dismissed.

II.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,  
THE ACTS IN THE COUNTIES DURING

COUNTY	Butter.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
				£ s. d.
Antrim, . . . .	41	—	—	—
Armagh, . . . .	62	—	—	—
Carlow, . . . .	69	—	—	—
Cavan, . . . .	63	1	1	1 0 6
Clare, . . . .	88	1	1	0 15 6
Cork, . . . .	259	33	32	23 2 2
Donegal, . . . .	66	—	—	—
Down, . . . .	45	—	—	—
Dublin, . . . .	116	—	—	—
Fermanagh, . . . .	29	—	—	—
Galway, . . . .	79	3	2	1 11 0
Kerry, . . . .	126	15	11	4 6 11
Kildare, . . . .	45	—	—	—
Kilkenny, . . . .	39	—	—	—
King's, . . . .	37	—	—	—
Leitrim, . . . .	41	—	—	—
Limerick, . . . .	116	1	1	0 0 6
Londonderry, . . . .	21	—	—	—
Longford, . . . .	14	—	—	—
Louth, . . . .	38	—	—	—
Mayo, . . . .	77	—	—	—
Meath, . . . .	36	—	—	—
Monaghan, . . . .	15	—	—	—
Queen's, . . . .	47	1	1	0 2 0
Roscommon, . . . .	32	—	—	—
Sligo, . . . .	20	—	—	—
Tipperary (N.R.), . . . .	69	—	—	—
Tipperary (S.R.), . . . .	62	2	1	0 19 4
Tyrone, . . . .	54	—	—	—
Waterford, . . . .	74	—	—	—
Westmeath, . . . .	73	—	—	—
Wexford, . . . .	43	1	1	0 12 6
Wicklow, . . . .	43	—	—	—
Total, . . . .	2,039	58	51	32 10 5

\* Prosecutions were instituted in respect of two samples, the one taken obtained, penalties of 15s. 6d. and 2s. 6d. respectively being imposed.

, † In only one case were proceedings instituted. The sample was

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER  
THE HALF-YEAR ENDED 30TH JUNE, 1911.

Margarine	Cheese.	Milk.			
		No. of Samples taken.	No. of Prosecu- tions.	No. of Convic- tions.	Penalties imposed.
					£ s d.
—	19	81	10	6	3 19 0
3	11	37	6	4	3 17 0
2	10	43	2	2	3 18 0
1	12	40	4	4	1 9 2
—	—	72	1	1	0 2 6
2	2	219	9	9	7 11 0
2	32	52	8	7	2 18 0
2	41	59	—	—	—
7	7	470	6	6	18 1 0
—	1	10	—	—	—
3	10	133	5	5	6 1 6
—	2	114	4	3	1 3 0
3	7	31	3	3	2 10 0
—	—	31	—	—	—
3	11	18	1	—	—
—	10	29	—	—	—
2	2	229	4	4	1 1 7
—	6	5	—	—	—
—	8	35	6	6	2 0 6
—	1	17	1	1	1 13 6
4	7	89	—	—	—
1	16	28	1	1	0 15 6
1	1	17	1	1	0 2 6
—	5	27	—	—	—
—	—	54	4	4	5 0 4
—	2	14	—	—	—
—	2	71	1	1	0 12 7
3	4	200	10	8	8 5 8
1	20	54	5	4	4 5 6
—	—	57	3	2	0 3 6
1	20	126	3	3	2 8 7
—	1	31	1	1	1 14 0
2	9	28	—	—	—
43*	†279	2,521	99	86	79 13 11

in Co. Galway and the other in Co. Tipperary (S.R.). Convictions were  
taken in the Co. Antrim. The case was dismissed.

III.—STATEMENTS GIVING PARTICULARS AS TO SAMPLES OF  
UNDER THE ACTS  
YEAR 1910.

BOROUGH	Butter.				Margarine.	
	No of Samples taken.	No of Prosecutions.	No of Convictions.	Penalties imposed.	No of Samples taken.	No of Prosecutions.
Belfast, . . .	170	5	5	£ s. d. 14 0 0	54	3
Clonmel, . . .	48	—	—	—	4	—
Cork, . . .	171	7	7	10 17 6	—	—
Drogheda, . . .	21	1	1	1 1 0	—	—
Dublin, . . .	123	8	8	28 0 0	4	4
Kilkenny, . . .	8	—	—	—	—	—
Limerick, . . .	116	2	2	0 14 6	8	—
Londonderry, . . .	18	1	—	—	8	—
Sligo, . . .	24	1	1	0 10 1	3	—
Waterford, . . .	54	1	1	0 19 0	—	—
Wexford, . . .	33	—	—	—	1	—
Total, . . .	786	26	25	56 2 1	82	7
Total for Year 1909	882	46	46	130 9 0	88	—

HALF-YEAR ENDED 30TH JUNE, 1911.

BOROUGH.	Butter.			
	No of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Belfast, . . .	51	2	2	£ s. d. 10 0 0
Clonmel, . . .	24	—	—	—
Cork, . . .	96	2	2	3 5 0
Drogheda, . . .	20	—	—	—
Dublin, . . .	73	5	5	22 10 0
Kilkenny, . . .	3	—	—	—
Limerick, . . .	92	8	8	4 1 0
Londonderry, . . .	17	—	—	—
Sligo, . . .	11	—	—	—
Waterford, . . .	35	1	1	0 11 6
Wexford, . . .	19	—	—	—
Total, . . .	441	18	18	40 7 6

\* Proceedings were instituted in respect of three samples taken in

BUTTER, MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS  
IN THE BOROUGH.

YEAR 1910.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
2	£ s. d. 1 5 0	4	712	74	73	86 15 0
—	—	4	97	3	2	4 4 0
—	—	—	417	37	37	35 1 0
—	—	—	128	—	—	—
4	5 10 0	—	1,040	52	51	128 0 0
—	—	—	41	1	1	1 1 0
—	—	10	398	8	7	1 4 6
—	—	3	55	4	4	6 8 0
—	—	6	59	20	8	7 8 0
—	—	—	85	1	1	1 13 6
—	—	—	103	5	4	5 12 6
6	6 15 0	27	3,135	205	188	277 7 6
—	—	30	3,170	130	127	223 4 0

HALF-YEAR ENDED 30TH JUNE, 1911.

Margarine	Cheese	Milk			
No. of Samples taken	No. of Samples taken	No. of Samples taken	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
22	1	358	61	59	£ s. d. 95 10 0
—	—	36	1	1	3 0 0
—	—	273	22	22	24 7 8
—	—	74	2	2	8 0 0
6*	—	620	54	48	129 12 0
—	—	29	1	1	1 10 0
5	6	276	9	7	3 2 6
4	3	41	6	6	15 15 0
3	1	23	3	3	1 16 0
—	—	69	4	4	8 14 1
—	—	56	8	6	9 3 0
40	11	1,856	171	159	300 10 3

Dublin, and penalties amounting to £4 were imposed.

IV.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER AND MARGARINE TAKEN, UNDER THE SALE OF FOOD AND DRUGS ACTS, 1875 TO 1899, BY THE DEPARTMENT'S OFFICERS DURING THE YEAR 1910.

BOROUGH OR COUNTY.	BUTTER.				MARGARINE.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Borough.				£ s. d.				£ s. d.
Drogheda, . . .	7	—	—	—	—	—	—	—
Dublin, . . .	4	—	—	—	1	1	1	3 0 0
Kilkenny, . . .	12	—	—	—	—	—	—	—
Wexford, . . .	4	—	—	—	—	—	—	—
County.								
Antrim, . . .	66	—	—	—	1	1	1	0 2 6
Armagh, . . .	56	—	—	—	—	—	—	—
Carlow, . . .	11	—	—	—	—	—	—	—
Cavan, . . .	16	1	1	0 2 0	—	—	—	—
Clare, . . .	21	1	1	0 0 1	—	—	—	—
Cork, . . .	103	4	4	5 8 11	—	—	—	—
Donegal, . . .	40	—	—	—	—	—	—	—
Down, . . .	83	3	3	2 13 6	1	—	—	—
Dublin, . . .	32	2*	1	5 0 0	—	—	—	—
Fermanagh, . . .	37	1	1	0 4 0	—	—	—	—
Galway, . . .	5	—	—	—	—	—	—	—
Kerry, . . .	49	3	3	1 16 0	—	—	—	—
Kildare, . . .	40	—	—	—	—	—	—	—
Kilkenny, . . .	12	—	—	—	—	—	—	—
King's, . . .	46	1	1	0 2 6	—	—	—	—
Leitrim, . . .	8	—	—	—	—	—	—	—
Limerick, . . .	40	—	—	—	—	—	—	—
Longford, . . .	19	—	—	—	—	—	—	—
Louth, . . .	13	1	1	1 5 0	—	—	—	—
Mayo, . . .	12	—	—	—	—	—	—	—
Meath, . . .	24	—	—	—	1	1	1	0 11 6
Monaghan, . . .	17	—	—	—	—	—	—	—
Queen's, . . .	15	—	—	—	—	—	—	—
Roscommon, . . .	8	—	—	—	—	—	—	—
Sligo, . . .	8	—	—	—	—	—	—	—
Tipperary (N.R.), . . .	20	—	—	—	1	—	—	—
Tipperary (S.R.), . . .	26	—	—	—	—	—	—	—
Tyrone, . . .	49	—	—	—	—	—	—	—
Waterford, . . .	18	—	—	—	—	—	—	—
Westmeath, . . .	7	—	—	—	—	—	—	—
Wexford, . . .	25	—	—	—	—	—	—	—
Wicklow, . . .	17	—	—	—	—	—	—	—
Total, . . .	970	17	16	16 12 0	5	3	3	3 14 0

\* These two prosecutions were in respect of one sample, one prosecution being for obstructing officer. No rule made in case.

One sample of Margarine-Cheese was taken in Co. Antrim during the period. Proceedings were instituted in respect of the sample, and a penalty of 4s. 6d. was imposed.

V.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER  
TAKEN, UNDER THE SALE OF FOOD AND DRUGS ACTS,  
1875 TO 1899, BY THE DEPARTMENT'S OFFICERS  
DURING THE HALF-YEAR ENDED THE 30TH JUNE, 1911.

BOROUGH OR COUNTY.	BUTTER.			
	No. of Samples taken.	No. of Prosecu- tions.	No. of Convic- tions.	Penalties imposed.
<b>BOROUGH.</b>				£ s. d.
Dublin, . . . .	1	—	—	—
Kilkenny, . . . .	8	—	—	—
<b>COUNTY.</b>				
Antrim, . . . .	3	—	—	—
Armagh, . . . .	10	—	—	—
Carlow, . . . .	14	—	—	—
Cavan, . . . .	11	2	2	0 5 0
Clare, . . . .	20	—	—	—
Cork, . . . .	82	3	3	1 19 1
Down, . . . .	20	—	—	—
Dublin, . . . .	15	—	—	—
Fermanagh, . . . .	2	—	—	—
Galway, . . . .	19	1	—	—
Kildare, . . . .	27	—	—	—
Kilkenny, . . . .	18	—	—	—
King's, . . . .	6	—	—	—
Limerick, . . . .	6	—	—	—
Louth, . . . .	6	—	—	—
Meath, . . . .	12	—	—	—
Monaghan, . . . .	15	—	—	—
Queen's, . . . .	12	—	—	—
Tipperary (N.R.), . . . .	6	—	—	—
Tipperary (S.R.), . . . .	3	—	—	—
Tyrone, . . . .	15	—	—	—
Westmeath, . . . .	12	—	—	—
Wexford, . . . .	6	—	—	—
Wicklow, . . . .	21	—	—	—
<b>Total,</b> . . . .	<b>370</b>	<b>6</b>	<b>5</b>	<b>2 4 1</b>

Two samples of Margarine were taken (one in the Borough of Dublin and one in Co. Galway) during the period. Proceedings were instituted in respect of the sample taken in Co. Galway, and a penalty of £1 3s. 11d. was imposed.

VI.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1911, THE  
NUMBER AND DISTRIBUTION OF PREMISES REGISTERED  
FOR THE MANUFACTURE OF, OR WHOLESALE DEALINGS  
IN, MARGARINE OR MARGARINE-CHEESE.

BOROUGH OR COUNTY.	No. of Premises Registered for Wholesale Dealings in Margarine or Margarine- Cheese.	No. of Premises Registered for the Manufacture of	
		Margarine.	Margarine- Cheese.
BOROUGH.			
Belfast, . . . . .	48	—	—
Clonmel, . . . . .	2	—	—
Cork, . . . . .	8	2	—
Drogheda, . . . . .	1	—	—
Dublin, . . . . .	39	—	—
Limerick, . . . . .	3	2	—
Londonderry, . . . . .	2	—	—
Sligo, . . . . .	1	—	—
Waterford, . . . . .	5	—	—
Wexford, . . . . .	1	—	—
COUNTY.			
Antrim, . . . . .	5	—	1
Armagh, . . . . .	1	—	—
Down, . . . . .	1	—	—
Dublin, . . . . .	5	—	—
Fermanagh, . . . . .	1	—	—
Galway, . . . . .	1	—	—
Kerry, . . . . .	1	—	—
King's, . . . . .	2	—	—
Louth, . . . . .	1	—	—
Tipperary (S.R.), . . . . .	1	—	—
Westmeath, . . . . .	1	—	—
Wexford, . . . . .	—	1	—
Total. . . . .	130	5	1

VII.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1911, THE  
NUMBER AND DISTRIBUTION OF PREMISES REGISTERED AS  
BUTTER FACTORIES.

BOROUGH.	No. of Registered Butter Factories	COUNTY.	No. of Registered Butter Factories.
Clonmel, . . . . .	1	Fermanagh, . . . . .	1
Cork, . . . . .	22	Kerry, . . . . .	28
Dublin, . . . . .	1	Leitrim, . . . . .	3
Limerick, . . . . .	3	Limerick, . . . . .	3
Londonderry, . . . . .	1	Londonderry, . . . . .	1
Waterford, . . . . .	1	Longford, . . . . .	5
		Monaghan, . . . . .	7
<b>COUNTY.</b>		Tipperary (N.R.), . . . . .	1
Antrim, . . . . .	2	Tipperary (S.R.), . . . . .	4
Armagh, . . . . .	2	Tyrone, . . . . .	5
Carlow, . . . . .	1	Waterford, . . . . .	6
Cavan, . . . . .	34	Wexford, . . . . .	5
Clare, . . . . .	2		
Cork, . . . . .	33	<b>Total, . . . . .</b>	<b>173</b>
Donegal, . . . . .	1		



## BUTTER AND MARGARINE ACT, 1907.

List of Names which have been approved by the Department for use in connection with Margarine, and in regard to which applications were received during the year ended the 30th June, 1911.

Banquet.	Handmaid.	Red Star.
Birch Tree.	Huswif.	
Blackbird.	Hyacinth.	Sabrina.
		Seesaw.
Cactus.	Iceberg.	Shandon Castle.
Castle.	Icoline.	Snodrop.
Challenge.	Imperial.	Snowdrop.
Chrysanthemum.	Imperial Crown.	Sovereign.
Committee.		Stand.
Consumers.	Jewel.	State.
County.		Sundew.
Crano.	Kingcup.	Sunflower.
Crenut.	Knutal.	Sweet Briar.
Crocus.		Sycamore Tree.
	Lion.	
Daffodil.	Lobby.	Tiger.
Dewtop.		
Duello.	Margo.	Union Jack.
	Mayco.	Uno.
Empire.	Maydew.	
	Mayfirm.	Veeco.
Falcon.	Mayflower.	Vegara.
Fatima.	Menu.	Vegetaria.
	Milnut.	Velvina.
Gardenia.		Vendo.
Garland.	New Century.	Viking.
Goal.	Nut.	Villa.
Gold Cross.	Nutera.	
Golden Bloom.		Walnut.
Golden Cross.	Olive Tree.	Walrus.
Golden Crown.		White Swan.
Golden Dew.	Palm Tree.	Willow.
Golden Eagle.	Pasella.	Woodbine.
Golden Guinea.	Pearloma.	
Golden Swan.	Pilot.	Yellow Bloom.
Grand National.	Poplar Tree.	
Green Star.	Primrose.	
Guildhall.	Probono.	
Guinea Gold.		

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

## WATER IN BUTTER.

The attention of Butter Makers is drawn to the following Regulation made on the 23rd April, 1902, by the Department in exercise of the powers conferred on them by Sections 4 and 24 of the Sale of Food and Drugs Act, 1899:—

Where the proportion of Water in a sample of Butter exceeds sixteen per cent., it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the Butter is not genuine by reason of the excessive amount of water therein.

Butter Makers should ensure that *Butter*, when prepared by them for the Markets, does not contain more than sixteen per cent. of water.

Infringement of the Regulation involves liability to a Prosecution.

LIST of ANALYSTS acting under the Sale of Food and Drugs Acts,  
1875 to 1907, for the Boroughs and Counties in Ireland.

Local Authorities.	Name of Analyst.
COUNCILS OF BOROUGH OF :—	
Belfast, . . . . .	J. Harold Totton, B.A., B.Sc., A.L.C.
Clonmel, . . . . .	Sir C. A. Cameron, C.B., M.D.
Cork, . . . . .	D. J. O'Mahony, F.C.S.
Drogheda, . . . . .	Sir C. A. Cameron, C.B., M.D.
Dublin, . . . . .	Do., do.
Kilkenny, . . . . .	Do., do.
Limerick, . . . . .	Do., do.
Londonderry, . . . . .	Professor John Robinson Leebody, M.A., D.Sc., F.L.C.
Sligo, . . . . .	Sir C. A. Cameron, C.B., M.D.
Waterford, . . . . .	Do., do.
Wexford, . . . . .	Do., do.
COUNTY COUNCILS OF :—	
Antrim, . . . . .	(Vacant).*
Armagh, . . . . .	J. Harold Totton, B.A., B.Sc., A.L.C.
Carlow, . . . . .	Sir C. A. Cameron, C.B., M.D.
Cavan, . . . . .	Do., do.
Clare, . . . . .	Do., do.
Cork, . . . . .	D. J. O'Mahony, F.C.S.
Donegal, . . . . .	Charles McMullan.
Down, . . . . .	Sir C. A. Cameron, C.B., M.D.
Dublin, . . . . .	Do., do.
Fermanagh, . . . . .	Do., do.
Galway, . . . . .	Do., do.
Kerry, . . . . .	D. J. O'Mahony, F.C.S.
Kildare, . . . . .	Sir C. A. Cameron, C.B., M.D.
Kilkenny, . . . . .	Do., do.
King's, . . . . .	D. J. O'Mahony, F.C.S.
Leitrim, . . . . .	Sir C. A. Cameron, C.B., M.D.
Limerick, . . . . .	Do., do.
Londonderry, . . . . .	J. Harold Totton, B.A., B.Sc., A.L.C. (temporary).
Longford, . . . . .	Charles McMullan.
Louth, . . . . .	Sir C. A. Cameron, C.B., M.D.
Mayo, . . . . .	Do., do.
Meath, . . . . .	Do., do.
Monaghan, . . . . .	Do., do.
Queen's, . . . . .	Do., do.
Roscommon, . . . . .	Do., do.
Sligo, . . . . .	Do., do.
Tipperary, North Riding, Do., South Riding,	Do., do.
Tyrone, . . . . .	Robert F. Blake, F.L.C.
Waterford, . . . . .	Sir C. A. Cameron, C.B., M.D.
Westmeath, . . . . .	Do., do.
Wexford, . . . . .	Do., do.
Wicklow, . . . . .	Do., do.

\* J. F. W. Hodges, F.L.C., F.C.S., acts as Analyst for the District of Carrickfergus.

## THE MERCHANDISE MARKS ACTS, 1887 AND 1909.

Regulations made by the Department of Agriculture and Technical Instruction for Ireland, with the concurrence of the Lord Chancellor of Ireland and of the Board of Trade, pursuant to Section 1 (1) of the Merchandise Marks (Ireland) Act, 1909, with regard to the Prosecution in Ireland of Offences under the Merchandise Marks Act, 1887.

1. The Department of Agriculture and Technical Instruction for Ireland shall, subject to the conditions in the next following Regulations prescribed, undertake the prosecution in Ireland of offences under the Merchandise Marks Act, 1887, in cases which appear to the Department to relate to Irish agricultural produce, or to the produce of any other Irish rural industry, and to affect the general interests of the country, or of a section of the community, or of a trade.

2. (i.) Every application to the Department to undertake a prosecution shall be accompanied by the following documents:—

(a) A statement showing the nature and circumstances of the case and sufficient to enable the Department to form an opinion whether the case relates to Irish agricultural produce, or to the produce of any other Irish rural industry, and affects the general interests of the country, or of a section of the community, or of a trade.

(h) A statement showing the facts which, if the Department undertake the prosecution, will be capable of proof, and setting out the proofs and names of witnesses available to prove such facts.

(ii.) The Department may require the above statements to be supplemented or additional evidence to be furnished.

3. If, on the evidence, the Department are of opinion that there is no reasonable prospect of a conviction being obtained, the Department will not, unless they think fit, undertake the prosecution.

4. If the Department are of opinion that the prosecution would be better or more properly conducted otherwise than under these Regulations, the Department will not undertake the prosecution.

5. The Department may, before undertaking a prosecution, require the applicant to give security for costs on such terms and in such manner as they think proper.

6. For the purpose of carrying these Regulations into effect, the Department may, from time to time, prescribe the use of such forms and give such directions as they may deem expedient.

T. P. GILL,

Secretary of the Department of Agriculture  
and Technical Instruction for Ireland.

14th April, 1910.

I concur in these Regulations.

S. WALKER, C.

The Board of Trade concur in these Regulations.

H. LLEWELLYN SMITH,  
Secretary.

THE MERCHANDISE MARKS ACTS, 1887 AND 1909.

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SUPPLEMENTARY REGULATION MADE BY THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND, WITH THE CONCURRENCE OF THE LORD CHANCELLOR OF IRELAND AND OF THE BOARD OF TRADE, PURSUANT TO SECTION 1 (1) OF THE MERCHANDISE MARKS (IRELAND) ACT, 1909, WITH REGARD TO THE PROSECUTION IN IRELAND OF OFFENCES UNDER THE MERCHANDISE MARKS ACT, 1887.

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Notwithstanding anything contained in the Regulations of the 14th April, 1910, made by the Department of Agriculture and Technical Instruction for Ireland pursuant to Section 1 (1) of the Merchandise Marks (Ireland) Act, 1909, it shall be open to the Department to undertake prosecutions in Ireland in those cases appearing to the Department to relate to Irish agricultural produce, or to the produce of any other Irish rural industry, and to affect the general interests of the country, or of a section of the community, or of a trade, in which the evidence is supplied by any of their officers.

T. P. GILL,

Secretary of the Department of Agriculture  
and Technical Instruction for Ireland.

31st October, 1911.

I concur in this Regulation.

REDMOND BARRY, C.

The Board of Trade concur in this Regulation.

H. LLEWELLYN SMITH,  
Secretary.

# MARKETS AND FAIRS (WEIGHING OF CATTLE) ACTS, 1887 AND 1891.

List showing the Fairs and Auction Marts in respect of which Exemption Orders were issued between the 1st July, 1910, and the 30th June, 1911.

Fair or Mart.	County or Borough.
Ardnaglass.	Sligo.
Ballisodare.	Sligo.
Ballybrood.	Limerick.
Ballykett.	Clare.
Ballynagauran.	Cavan.
Bawnboy.	Cavan.
Buttevant.	Cork.
Callan, P. Grainger's Mart.	Kilkenny.
Cappataggle.	Galway.
Carney.	Sligo.
Cashel, N. Maher & Son's Mart.	Tipperary.
Charleville, Miller & Mannix's Marts (two).	Cork.
Charleville, M. S. Sheedy's Marts (two).	Cork.
Claremount.	Galway.
Cloone.	Leitrim.
Croom.	Limerick.
Currans.	Kerry.
Dowra.	Cavan.
Esakey.	Sligo.
Emly.	Tipperary.
Enniscrone.	Sligo.
Fethard, W. Toppin's Mart.	Tipperary.
Garrison.	Fermanagh.
Glenogra.	Limerick.
Granlahanmore.	Roscommon.
Hospital, W. H. Madden's Mart.	Limerick.
Inserickelly.	Galway.
Keelogue.	Mayo.
Kilfinane, J. F. O'Hurley's Mart.	Limerick.
Kilgolagh.	Cavan.
Killeshandra.	Cavan.
Kilmaine.	Mayo.
Kilmallock, P. D. Clery's Mart.	Limerick.
Kilmallock, W. H. Madden's Mart.	Limerick.
Kilteely, W. H. Madden's Mart.	Limerick.
Knockaney.	Limerick.
Labasheeda.	Clare.
Limerick, Pitt's Marts (two).	Limerick (Borough of).
Liscarroll.	Cork.
Loughmask.	Mayo.
Mount Talbot.	Roscommon.
Moycullen.	Galway.
Moyne.	Mayo.
Quin.	Clare.
Rathlacken.	Mayo.
Saggart.	Dublin.
Skryne.	Meath.
Stonehall.	Limerick.
Thurles, N. Maher & Son's Mart.	Tipperary.
Thurles, T. Ryan's Mart.	Tipperary.
Tipperary, N. Maher & Son's Mart.	Tipperary.
Turlough.	Mayo.
Tyrrellspass.	Westmeath.

# REPORT OF THE DIRECTOR OF THE GEOLOGICAL SURVEY OF IRELAND

*For the Year ending 31st March, 1911.*

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND.

Sir,

I have the honour to submit the following Report on the work of the Geological Survey of Ireland for the year ending 31st March, 1911.

MR. W. B. WRIGHT, B.A., rejoined the staff of the Survey on the 1st July, 1910, thus filling the vacancy caused by the retirement of MR. H. J. SEYMOUR.

The mapping on the six-inch scale of the areas in north-west Ireland, which had hitherto been dealt with only on the one-inch scale, was continued as a principal part of the field-work of the year. Areas in western and south-eastern Donegal and in the county of Londonderry were thus geologically surveyed, and the opportunity was taken of examining the mode of occurrence of the remarkable orbicular granite at Mullaghderg, north of Dungloe. Large specimens of this rock were obtained for the collections.

Clew Bay and Clare Island were revisited for the completion of the description of the superficial deposits in the forthcoming memoir on the island.

Selected soils of Clonakilty and of Clare Island were investigated and classified in the Laboratory. A number of soils selected as types from Irish districts were determined by mechanical and chemical analyses. A beginning has thus been made in the establishment of a standard series of soils with which those of any area can be compared.

Duplicate reference copies were made from the field six-inch maps of parts of the counties of Donegal, Sligo, Monaghan, and Roscommon. Progress was made with manuscript sheets of the new quarter-inch geological map of Ireland. A colour-scheme was drawn up in detail for use in future colour-printed maps, based on the new scheme prepared by the Ordnance Survey.

In the Museum, MR. A. C. ROWAN, working as a Temporary Professional Assistant, until MR. W. B. WRIGHT could be set free from his duties in Scotland, arranged cases of specimens illustrating the Limerick and Londonderry districts. Numerous specimens of materials used as road-metal in Ireland were also exhibited.

MR. W. D. HAIGH, A.R.C.Sc.I., was employed during the greater part of the year as Temporary Professional Assistant in the Laboratory.

A number of enquiries respecting Irish rocks and water-supply were received, those raising economic questions being answered in consultation with the Economic Geologist to the Department.

The International Geological Congress in Stockholm in the summer of 1910 was attended by three members of the Geological Survey staff. The Director was present on behalf of the Royal College of Science for Ireland, and took part in the visit to Spitsbergen in July. As Director of the Survey, he was nominated to a seat on the Council of the Congress. MR. T. HALLISSEY represented the Survey at the concurrent Agrogeological Congress. MR. W. B. WRIGHT also attended, and took part in visits to Lapland and southern Sweden.

I am, Sir,

Your obedient Servant,

GRENVILLE A. J. COLE.

15th December, 1911.

# REPORT OF THE DIRECTOR OF THE NATIONAL MUSEUM OF SCIENCE AND ART

FOR THE  
YEAR 1910-1911.

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit the following Report for the twelve months, from 1st April, 1910, to 31st March, 1911:—

In presenting my Annual Report I am glad to say that the Museum is daily becoming more thoroughly availed of for educational purposes. This year, 1,020 students have been registered as attending the Zoological and Botanical Divisions, and a large number of students in Geology.

The Metropolitan School of Art is steadily increasing its demand on loans, and very many of the general public apply constantly to the Art and Industrial Section for information. In this way there is some compensation for the falling off of the general attendance.

By an arrangement with the Canadian Boards of Education, a body of 170 teachers from Canada visited the Museum, in succession to a large party of students from Canadian schools.

With regard to the exchange system that I proposed to establish between our Museum and other Museums throughout the Empire, in May I received a letter from His Excellency the Governor of New Zealand, Lord Plunket, in which he stated that he thought my suggestion would bear fruit in New Zealand. "My Government," he added, "have sent an extract from your letter to the Auckland, Wellington, Christchurch, Otago, and Wanganui Museums, and they impressed upon the respective authorities the advantages of your offer. Exchanges of Maori and Celtic carvings or photographs of carvings and ornamentations should be interesting."

I paid frequent visits to London during the year, securing loans of embroideries, tapestries and stained glass from South Kensington to meet, to some degree, the demands of our students and workers. I had the opportunity of examining the exhibition of early Chinese pottery and porcelain in the Burlington Fine Arts Club, and the temporary collection of Chinese and Japanese prints in the British Museum, as well as the Anglo-Japanese Exhibition. I also visited the important exhibition of alabaster carvings of English origin, and a large number of private collections. I obtained the promise of the War Office to give us the assistance we required in securing from the various armouries objects of historical or other interest for our Museum. I also attended the Town Planning Conference in London, of which I was a Vice-President, keeping in view the desirability of forming a permanent Town Planning Section in our Museum.

Mr. Talbot Hughes again lent us a large number of beautiful costumes of the 18th and early 19th centuries. Mr. Falkner generously lent us a rare collection of old English pottery, principally saltglaze, which had been on loan in the Salford Gallery, adding a large number of pieces, and he enabled us to bring out an excellent and well-illustrated catalogue of these curious objects. To the Rev. Professor Henry Browne we are indebted for the arrangement and loan of many finds from the Cretan explorations, and we were glad to lend to his collection started in the University College, for the illustration of his lectures on Greek Literature and Social History. Mr. J. W. Boardman Milligan very kindly undertook to collect and send us a series of Nigerian axeheads and other curios.

The time limit of the loan from the Royal Society of Antiquaries of Ireland having been reached, the Society kindly renewed it for another year. This collection has been placed in the South-West Crypt, which was specially fitted up for its reception.

The collection of Coins left to the Museum under the will of the late Mr. Patrick Murphy, of Newry, was handed over by the executors, and is now in the care of the Keeper of the Art and Industrial Division.

The small Lecture Theatre recently constructed adjoining the Industries Section being ready, arrangements were made for six lectures to be delivered in the Spring of 1911. Three of these lectures were delivered before the end of the year :—

Count Plunkett: "The National Museum."

Professor Cole: "Volcanoes as illustrated by the Models in the Museum."

Dr. Scharff: "Animals of Ireland."

The lectures were popular and well attended.

I also delivered a Lecture in the Museum, to the Master Painters' Convention, on Decoration.

Earlier in the year an exhibition was held, in the porch of the National Library, of papers, books, drawings and paintings, illustrating the career of Sir Samuel Ferguson, whose Centenary was being celebrated at the time.

The Board of Education of England some time ago generously transferred to the Museum the copyright in the Handbook entitled: "Early Christian Art in Ireland," by Miss Margaret Stokes, on the understanding that a new edition would be published. Accordingly I prepared a new edition for issue as a Museum Handbook and Guide to our Collection of Irish Antiquities.

The Museums Association accepted the invitation of the Department, conveyed to them by me, to hold their next annual conference in Dublin. This will take place in July, 1912.

The purchases of the year that are of most historical importance were in the Art and Industrial Division, and included some 17th century silver spoons which supplied missing data for the history of Irish silverwork.

In the matter of administration I may note that we decided, on the suggestion of Professor Cole, to form a small students' collection of Minerals and Rocks under the care of Dr. Scharff.

The electric light being very unsatisfactory, and so intermittent as to leave the building insecure, we recommended the removal of the arc lamps, asking that they should be replaced by high power Osram, a work which has been commenced.

The old porch having been removed, it was necessary to make a re-disposition of a considerable portion of the Natural History Section.

The sale of the Guides is satisfactory.

Of the Halfpenny Guide, now in its 49th edition, 3,422 copies have been sold during the year, and of various chapters or parts of chapters of the General Guide, 987 copies.

New editions of the Guides to English Furniture and Ivories have been brought out. We have added the Catalogue of the Falkner Loan Collection, and Chapter 2 of the Guide to Coins and Medals, using illustrations freely in the new issues and editions, and still keeping the price down; issuing the illustrated Guides at twopence each, and the unillustrated at one penny.

Perhaps the most important publication of the year was the Museum Bulletin, of which two parts have been issued. This publication, in which the text and illustrations are on a liberal scale, deals with the various collections and records the recent accessions. It was greatly needed, particularly for the purpose of making the Museum better known to like institutions out of Ireland, and it not only is to the credit of the Museum, but will add very considerably to its usefulness and popularity.

I append the reports from the heads of the various sections, as well as the returns of attendance, and lists of acquisitions and loans.

G. N. COUNT PLUNKETT,  
*Director.*



## APPENDIX I.

RETURN SHOWING NUMBERS OF VISITORS TO THE NATIONAL MUSEUM  
OF SCIENCE AND ART.

Months.	Totals. 1909-1910	Week-days. 1910-11.		Sundays.	Totals. 1910-1911
		Mornings.	Evenings.		
April, . . .	22,760	16,216	323	2,277	18,816
May, . . .	23,456	18,338	528	2,571	21,437
June, . . .	24,116	17,268	375	2,080	19,723
July, . . .	26,746	21,625	425	2,810	24,860
August, . . .	33,126	29,286	621	2,833	32,740
September, . . .	26,883	21,354	585	2,942	24,881
October, . . .	22,148	18,871	426	3,241	22,538
November, . . .	21,267	17,281	414	2,478	20,173
December, . . .	19,511	19,278	437	1,577	21,292
January, . . .	20,859	17,702	452	3,251	21,405
February, . . .	16,851	16,712	437	2,330	19,479
March, . . .	21,602	19,919	852	2,266	23,037
	279,325	233,850	5,875	30,656	270,381

## APPENDIX II.

## REPORT OF THE KEEPER OF THE IRISH ANTIQUITIES DIVISION.

During the year 200 objects have been registered; of these 198 were deposited by the Royal Irish Academy, and included 140 objects illustrating early Japanese civilisation, for the comparative collection, registered under the same number. One object was obtained by direct purchase and another by gift. Among the more important objects added to the collection may be mentioned the fine gold Lunula discovered at Lisnover, Co. Cavan, and acquired by the Royal Irish Academy as Treasure Trove; an interesting example of an early stone lamp presented by Mr. J. S. Moss, and a very interesting bronze blade and ferrule found in Lough Roodh bog, near Tullamore, King's County.

The whole of the first edition of the Guide to the Celtic Christian Antiquities having been sold off, a second was prepared by the Royal Irish Academy and issued in July. It has been most favourably received in Germany and Norway, and the sales have been good.

In Room No. II., some more stone celts have been placed on exhibition, and two counties—Waterford and Longford—not formerly represented, are now included, with one celt for each. A number of flint fabricators from Co. Antrim have also been placed on exhibition.

In Room No. III., a descriptive label has been placed over the tore case, and the fine collection of glass beads has been re-arranged and labelled. This almost completes the descriptive labelling of Room No. III. A new case containing horse furniture on one side, and a large collection of leather shoes on the other, has been arranged and placed on exhibition in this room. Since February, 1911, a good deal of time has been spent arranging the loan collection of the Royal Society of Antiquaries of Ireland in the south-west

crypt, which is being fitted up for the purpose. The collection is a large one and involved much care in sorting out scattered "finds." A good deal yet remains to be done.

The catalogue of the Anglo Irish Coins in the R. I. A. collection has been revised and is being issued as one of the Museum Guides.

GEORGE COFFEY.

### APPENDIX III.

#### REPORT OF THE KEEPER OF THE ART AND INDUSTRIAL DIVISION.

The work of this Section has gone on steadily for the past twelve months—some more of the arrears which had accumulated owing to the very inadequate staffing of the Section in past years, having been worked off and new work undertaken.

The number of visitors who, desiring to obtain information about various matters connected with Art, Archaeology, etc., make personal inquiry at the Keeper's Office, seems to increase steadily each year. These inquiries, together with those made by letter, occupy a good deal of time, and have not hitherto been adverted to in the annual reports.

The establishment this year of a course of winter evening lectures, illustrative of the collections in the Museum, seems likely to prove of benefit both to the public and to the Museum. The lecture on "Handsome Lace" was followed by a great number of requests for information about the different varieties of this fabric, and several donations of lace were received in consequence of it.

STAFF.—The strength of the staff remains the same as last year, but it is very satisfactory to be in a position to note that the recommendations urged for some few years past as to the proper recognition of Mr. Dudley Westropp's services in the Museum are about to be acted upon, and that he is to be attached to the Staff in a more permanent way than before. The other members of the Staff—Mr. Toppin, Mr. McGoogan, and Mr. Stanton—have attended zealously to the duties assigned to them.

TRAVELLING.—In April, 1910, Mr. Westropp went to Belfast to arrange for the transfer to Dublin of the collection of exhibits which had been got together in connection with the Sir Samuel Ferguson Centenary Celebration. In May he went to Belfast to make some inquiries and to search the files of local newspapers for information about the manufacture of glass in Belfast.

In December he went to Salford Museum to take over the Collection of English pottery figures, groups, etc., lent to the Dublin Museum by Mr. Frank Falkner. At the same time he visited the Municipal Museum, Liverpool, where he was kindly assisted in studying the valuable pottery collection there by Mr. P. Entwistle. On his way back he stopped at Chester and was shown the valuable collection of Oriental porcelain, enamels, etc., belonging to Mr. Moss.

In March, 1911, he went to Carrickfergus with a view to selecting arms offered to the Museum by the War Office.

In March this year, Mr. Stanton spent a fortnight in London visiting the principal Museums and studying the collections therein. He paid special attention to the Greek and Roman antiquities in the British Museum, and was kindly assisted by several members of the staff of that Department, including Mr. Forsdyke, who gave him a good deal of help.

In September last year I visited the following Museums:—

Cologne.—Kunstgewerbe Museum, and Wallraf-Richartz Museum.  
Mainz.—Museum of Antiquities.

Stuttgart.—Landesgewerbe Museum, the Royal Collection of Antiquities, and the Museum für Bildenden Künste.

Munich.—The National Museum, the two sections of the Deutsches Museum, the Glyptothek, the Ethnographical Museum.

London.—The Victoria and Albert Museum.

The following new Guides or new editions were issued during the year :—

- Part VII., Chapter 3.—French Pottery (illustrated);
- Part VIII., Chapter 3.—English Furniture (new edition);
- Part XV.—Pictile Ivories (new edition, illustrated);
- Part XI., Chapter 2.—Medals (illustrated).

Catalogue of Falkner Loan Collection of Pottery (illustrated).

This year the illustration of the guides has been begun. This, it is hoped, will greatly increase the usefulness of the guides, as it has undoubtedly increased their interest. The prices of the illustrated guides are being kept as low as possible, ranging from two pence to fourpence, according to the amount of matter and the number of plates, these numbering from half-a-dozen to a dozen or more. The short General Guide (sold at a half-penny) has reached its forty-ninth edition.

**GREEK AND ROMAN COLLECTIONS.**—The acquisition of a very beautiful little Greek terra-cotta figure of a female was omitted from last year's report. Its exact provenance is not known, but it is similar to those little figures found in great numbers at Tanagra, during excavations in 1874, and assigned to the 5th century B.C. The Rev. Professor H. Browne, of University College, is arranging to lend a collection of fragments of Cretan pottery, and promises kindly to allow a portion of it to remain permanently in the Museum. The sherds are of very great interest, belonging to an early period, not already represented in the Museum collections.

A small collection of sherds from Tiryns has been given by Mr. Charles McNeill.

**EARLY ORIENTAL COLLECTIONS.**—Above a dozen casts of Assyrian sculptured stone slabs, removed from the Egyptian Room to the store some years ago, have been got out and, for want of a more suitable position, have been set up against the wall of the Annex.

**EGYPTIAN COLLECTION.**—A further donation of miscellaneous objects—from the excavations of Abydos and Ehnasiya—has been received from the Egypt Exploration Fund. It has been placed on exhibition, but is not yet properly classified and arranged.

**ETHNOGRAPHICAL COLLECTIONS.**—Pending the fitting up of the proposed steel frame wall casing along the east wall of the ethnographical room, to be begun this month (April), very little has been done with the collections. The new casing will give a good deal more exhibiting space, and will allow some of the present overcrowding of the specimens to be relieved. A valuable gift of rare weapons, from Central Africa, has been received from Dr. Charles E. Gardiner, through Sir William Thornley Stoker, M.D. A collection of very interesting Mexican antiquities has been lent by W. J. Campbell, Esq. A few small items, including two rare and interesting Marquesas fans, have been acquired. It is hoped this year to re-arrange the whole of the American and Pacific Islands collections.

**INDIAN AND PERSIAN COLLECTIONS.**—No additions.

**MUSICAL INSTRUMENTS.**—A very interesting set of musical glasses, arranged in a neat mahogany case, probably of Dublin make, has been purchased, also a curious mechanical chamber orchestra, by Woffington, Dublin. Two interesting violins, one by Perry and another by a Cork maker, have been added. A set of Irish bag-pipes by Egan, Dublin, has been given by Dr. Henebry, and a valuable large harp, by Cousineau, Paris, 18th century, has been lent by Count Plunkett.

**FURNITURE COLLECTIONS.**—A number of specimens have been lent to the Cork Municipal Museum, and so the overcrowding in several parts of these collections has been somewhat relieved. It is hoped by altering the platforms, to re-arrange the whole collection of furniture this year, so as to display the specimens to more advantage. Two interesting additions have been made, viz., a wall clock from a house in William Street, with a marquetry case of 18th century workmanship, showing an interesting figure in military costume; and a mahogany wine tray of Irish make of the middle of the 18th century.

**ARCHITECTURAL CASTS.**—As a preliminary towards making the Main Court of the Museum the receptacle for objects illustrating the art, archaeology, etc., of Ireland, some of the large plaster casts have been removed from it. During the past year the large *cell-de-boeuf*, the original by Jean Goujon in the Courtyard of the Louvre, and the other casts alongside it, have been removed from the west wall above the Main Gallery, and placed high up on the south wall of the Annex. Other casts will also be removed as opportunity offers.

**BIJOUTERIE.**—About a dozen items have been purchased, several of Irish interest, including a rare gold reliquary cross of the 17th or early 18th century, also a small silver reliquary and a silver rosary ring. A splendid facsimile of the celebrated Hunterstone Brooch, in the Museum of the Scottish Society of Antiquaries, Edinburgh, has also been obtained.

**COSTUME.**—The development of this collection goes on steadily. The ecclesiastical costume has had an addition of an embroidered chasuble of 17th century Spanish work, and the Victoria and Albert Museum has lent some interesting church vestments, Spanish, Italian, etc. Several pieces of Irish interest have been added to the military costume, including an early 19th century volunteer coat, several silver beltplates, one belonging to the Belfast Merchants Corps, one to the Linen Hall Corps, 1796, and one to the Trinity College Corps, 1797. An Irish Volunteer tunic, lent a few years ago by Mr. C. G. F. Chute, has been presented by him. A Spanish officer's uniform has been presented by Miss Hogg. To the civil costume has been added a fine embroidered petticoat of Queen Anne period, as well as an embroidered reticule which belonged to the Princess Sophia (daughter of George III.). Mr. Talbot Hughes, of London, lent a collection of ladies' and gentlemen's costumes of the 18th and early 19th century. A very interesting curtain of cotton, printed in colours, with a quaint representation of a review of Volunteers in the Phoenix Park, given by Mr. R. B. Armstrong, of Edinburgh, has been framed and exhibited with the military costume.

**COINS AND MEDALS.**—The re-arrangement and labelling of the English coins is nearing completion. A good many *lacunae* remain to be filled up, but this can now be done very rapidly, in so far as all but the very rare types are concerned. Some half-dozen items have been purchased during the year, and Mr. Martin J. Blake has given a small but valuable miscellaneous collection.

The collection of Irish medals is being added to every year—this year's addition including several by the Mossops. A curious silver badge of the Irish Druids, dated 1792, has been purchased. Several very good medals and plaques by modern French artists, including Chapu and Roeh, have been added. A copiously illustrated catalogue of the medals, compiled by Mr. Westropp, has just been put on sale.

**ARMS AND ARMOUR.**—The swords, the pistols, and the hand guns and rifles are all arranged so as to be very well seen. A series, added to very liberally by the War Office, showing the later developments of the hand guns and rifles, is of special interest. Several cases of the new steel frame type have been added to enable the collection to be properly displayed.

**CARVED IVORIES, ETC.**—An Irish carved wood crucifix, dated 1722, has been added. A very interesting painted and gilt terra-cotta figure of a saint has been purchased and placed with the beautiful carved wood figure of the Saviour by Alonso Cano, as it evidently belongs to his school.

**JAPANESE COLLECTION.**—Seventeen *netzukés* in carved wood, ivory, and jade, have been purchased.

**POTTERY, PORCELAIN AND GLASS.**—The work of labelling and describing the Longfield Collection, purchased last year, has occupied a good deal of time this year. The additions include several interesting examples of English glazed pottery, stoneware and Wedgwood ware; several specimens of French faience, Italian majolica, and Dutch delft; and one specimen of Persian pottery. A very good set of Chinese blue and white hearth tiles has been added to the porcelain collection, as well as about a dozen other interesting examples of Chinese, English, French, and German manufacture.

A valuable collection of Nailsea glass vessels has been purchased; also two very beautifully engraved goblets of early Bohemian glass. The Irish glass collection has been enlarged by the addition of about half-a-dozen interesting specimens. Two panels of fragments of antique Roman glass have also been added.

Several collectors have shown their interest in the Museum by donations and loans. These are noted in the lists attached to this Report.

**CHINESE, BURMESE, AND CINGALESE COLLECTIONS.**—A valuable Chinese bronze figure of a Buddhist priest has been purchased, as well as several other less important items. Another case of Chinese costume has been arranged.

**EMBROIDERIES AND TEXTILES.**—Two interesting examples of Spanish embroidery have been purchased, and a quaint panel of Stuart stump embroidery. The Dun Emer Tapestry panel, and the large coloured photographs of tapestries in the Victoria and Albert Museum, have been hung in a better position in the Annexe, and the frames have been fitted with blinds to prevent injury from sun-light.

**LACE.**—About fifteen valuable pieces have been purchased for this collection, including Venetian point, point d'Argentan, Valenciennes, Mechlin, and point d'Angleterre. The arrangement remains practically the same as last year. The collection is already congested, and it is hoped, this year, by the removal of one or other of the contiguous collections, to allow of its further extension.

**METALWORK.**—In the general metal-work collection no material alterations have been made, nor any additions of importance, except a curious cast-iron fireback, of Dublin make, dated 1737. The more notable additions to the silver include a valuable Irish Chalice, dated 1683, a plain bowl, dated 1729 (Dublin), a tripod sugar bowl, Dublin, 1780; a Galway spoon, about 1665; a London spoon, 1661-2; two Dublin spoons, 1663-4, and a London apostle spoon, 1635. A sugar basket of about 1775 has been added to the Sheffield plated ware. Miss Bastable has lent a collection of caddy spoons, étuis, tooth-pick cases and similar small objects of interest.

**BOOKBINDINGS.**—Two additions have been made: a very good example of Venetian work, and another of Dublin work, both 18th century.

**ENAMELS.**—A pair of Battersea enamel candlesticks has been purchased.

**MINIATURES.**—The case containing this collection has been removed to a more suitable position on the Main Gallery, where the miniatures will be less susceptible to injury from strong light, and curtains have been fitted to the case. Four miniatures, in colours, have been obtained, and a small collection of silhouette portraits, mostly by Dublin artists of the early 19th century, has been arranged in the same case.

**ILLUMINATION.**—The copies of early illumination and ornamental scribe-work have been arranged, with some examples of modern work, on the wall of the Rotunda Gallery.

**STAINED GLASS.**—A reproduction of one light from a window in Winchester College Chapel has been set up under the Gallery of the Central Court. Some coloured drawings of good stained glass have been acquired, and arranged with others already in the Museum, and also some large coloured plates from a valuable German work on the subject, on the wall of the Rotunda Gallery.

**ENGRAVINGS.**—A small collection of original engravings, illustrating some of the processes of that art, has been arranged on the wall of the Rotunda Gallery. Here also are exhibited a series of hand-coloured engravings illustrating the wall decorations in the Vatican.

**INDUSTRIAL COLLECTIONS.**—No additions have been made. It is hoped that more attention will be given to the development of these collections very soon. More space will, of course, be necessary to allow of this. Perhaps the buildings at present occupied by the Royal College of Science, St. Stephen's Green, could be procured for this purpose, when they are vacated by the transfer of the College to the new buildings in Merrion Street.

**PHOTOGRAPHS OF SILVER PLATE.**—This year again we have been indebted

to Messrs. John Smyth and Sons, Messrs. Gunning and Reynolds, and Messrs. Donegan, for obtaining permission for us to photograph interesting examples of antique altar-plate.

**ARCHITECTURAL PHOTOGRAPHS.**—The arrangement of the Dunraven collection of photographs of Irish architecture has been completed, and similar treatment of the very valuable collection of photographs from negatives kindly lent by Mr. T. J. Westropp is about to be undertaken. Mr. Westropp has still further contributed to the collection this year.

**POSTAGE STAMP COLLECTION.**—Mr. Lane Joynt continues to give his services gratuitously in the development of this collection. The registration of the collection, begun last year by Mr. Stanton, has been completed this year. It numbers over, 18,000 specimens. Two hundred stamps have been added, including two sets given by the Government of Rhodesia and the Nyasaland Protectorate. It has been considered desirable to remove the rare "inverted swan" stamp (valued at about £500) from the general collection, and to exhibit it in the steel safe case containing the miniatures, close by the collection.

**MUSEUM LIBRARY.**—About forty works have been purchased this year, and six valuable books have been given, as well as a large number of pamphlets, museum reports, catalogues, guides, etc.

**LOANS TO METROPOLITAN SCHOOL OF ART.**—The following is a summary of the objects lent:—

- Lace, embroidery and textiles (16).
- Architectural ornament, etc. (6).
- Tiles.
- Metalwork (7).
- Woodwork, etc. (2).
- Water-colours (7.)
- Illumination (1).
- Pottery (2).
- Case of Japanese Coins.
- Irish Antiquities (from Circulation Collections).
- Photographs.
- Books.

**CIRCULATION COLLECTIONS.**—There were 472 issues during the year. Eight new cases were prepared, bringing the total up to 326.

The lists of (a) Chief Acquisitions by Purchase, (b) Gifts, and (c) Loans, are appended.

J. J. BUCKLEY,  
*Keeper,*

(a.) CHIEF ADDITIONS BY PURCHASE.

- Greek and Roman Antiquities (Room I., G.F.)
  - Greek Tanagra figures.
- Ethnographical Collection (Room III., G.F.)
  - Two Marquessa fans.
- Musical Instruments (Room VII., G.F.)
  - Set of Musical glasses.
  - Mechanical organ, by Woffington, Dublin.
  - Violin, by Perry, Dublin.
  - Violin, by —, Cork.
- Furniture (Rooms VIII., IX. and X.)
  - Wall clock, from a Dublin house.
  - Mahogany wine tray and stand.
- Bijouterie (Central Court).
  - Gold reliquary cross.
  - Silver rosary ring.
  - Silver reliquary.
  - Copy of the Hunterston Brooch.

- Costume (Central Court).  
 Chasuble, Spanish, 17th century.  
 Irish Volunteer coat.  
 Military tunics (3).  
 Irish Volunteer belt plates (4).  
 Embroidered petticoat.  
 Reticule of Princess Sophia.
- Coins and Medals (Central Court).  
 Coins, various (7).  
 Badge, "Irish Druids," 1792.  
 Medals, various (13).  
 Bronze plaque, Modern French, by Chapu.  
 Bronze plaque, Modern French, by Roch.  
 Badge, United Irishmen, worn by Lord Edward Fitzgerald.
- Ivories, etc. (Room VI., First Floor).  
 Carved wood crucifix, Irish, 1722.  
 Terra-cotta figure of monk, Spanish.
- Japanese Collection (Room VII., First Floor).  
 Netsukés (15).  
 Tiger, bronze.
- Pottery and Porcelain (Room VIII., First Floor).  
 Pair of English pottery lions.  
 English pottery, seven specimens.  
 French faience, five pieces.  
 Italian maiolica, plate and bowl.  
 Dutch pottery, three pieces.  
 Persian bowl.  
 Chinese porcelain tiles (20).  
 Chinese bowls (2).  
 Satsuma bottle.  
 Chinese snuff bottle.
- Glass (Room VIII., First Floor).  
 Salad bowl, Irish.  
 Sweetmeat glass, Bohemian.  
 Goblet, Bohemian.  
 Goblet, South German.  
 Sweetmeat glass, English.  
 Tweedmouth glass, English.  
 Nailsea glass, 19 specimens.  
 Two panels of Roman glass fragments.
- Chinese Collections (Room IX., First Floor).  
 Chinese bronze, a Buddhist priest.  
 Crystal snuff bottle.
- Textiles (Room X., First Floor).  
 Chinese silk scarf.  
 Embroidered hanging, Spanish.  
 Altar Cloth, Spanish.  
 Panel, English Stamp Embroidery.
- Lace (Main Gallery).  
 Pair of lappets, Old Valenciennes.  
 Lappet, Point d'Angleterre.  
 Point de Venise, two pieces.  
 Cap crown, Point d'Argentan.  
 Parchment pricking, Mechlin.  
 Altar frontal, Irish.
- Miniatures (Main Gallery).  
 Miniature portraits (4).  
 Silhouette portraits (5).
- Bookbinding (Main Gallery).  
 Dublin binding, 18th century.  
 Folio, Venetian, 18th century.
- Metalwork (Main Gallery).  
 Cast-iron fire back, Dublin, 1737.

- Silver (Rotunda Gallery).  
 Chalice, Galway, 1683.  
 Taper box, Dublin, about 1750.  
 Bowl, Dublin, 1729.  
 Tripod sugar bowl, Dublin, 1780.  
 Puritan spoon, London, 1661-2.  
 Apostle spoon, English, 1635.  
 Two spoons, Dublin, 1663-4.  
 Puritan spoon, Galway, about 1660-70.  
 Sheffield plated sugar basket.  
 Silver Freedom box, Dublin, 1741.  
 Enamels (Rotunda Gallery).  
 Pair of Battersea candlesticks.  
 Illumination.  
 Illuminated letter, Modern Irish.  
 Architectural Decoration.  
 Mosaic panel, Modern, by G. Bridge.  
 Water-colour drawings of architectural ornament.  
 Water-colour drawings of stained glass windows.  
 Postage Stamps (Main Gallery).  
 Various specimens (200).

## (b) LIST OF DONATIONS.

- R. W. W. Alexander, Esq.—  
 Alabaster figure of Buddha.  
 Col. W. A. Alexander—  
 Specimens of pottery and porcelain.  
 M. Alshuler, Esq.—  
 Half-dollar, Chicago Exposition, 1892.  
 R. B. Armstrong, Esq.—  
 Linen curtain, printed with a review of the Irish Volunteers.  
 Belfast Museum, per A. Deane, Esq.—  
 Fragments of glass from Ballycastle.  
 Martin J. Blake, Esq.—  
 Collection of coins.  
 F. Bradbury, Esq.—  
 Photographs of a Sheffield plated dish ring.  
 R. F. A. Burns, Esq.—  
 Cannon ball.  
 British Museum, Trustees of—  
 Medallie Illustrations, Parts 12-14.  
 C. G. F. Chute, Esq.—  
 Irish military jacket.  
 M. Clinton, Esq.—  
 One-third farthing, George IV.  
 James D'Arcy, Esq.—  
 Pottery lamp from Carthage.  
 Egypt Exploration Fund—  
 Collection of antiquities from Abydos and Ehnasiya.  
 Egyptian Research Account—  
 Book: Memphis, Vol. II.  
 Capt. J. Esmonde White—  
 Padlock, from Northern Nigeria.  
 James J. Fuller, Esq.—  
 Book: Murphy's Arabian Antiquities.  
 Charles E. Gardiner, Esq., per Sir W. Thornley Stoker—  
 Trophy of weapons, from Central Africa.  
 Rev. R. Henebry—  
 Bagpipes, by Egan, Dublin.



- Miss Hogg—  
Spanish officer's uniform.
- Japanese Government—  
Books (2): Old Fine Arts and Modern Fine Arts at the Japan  
British Exhibition.
- Manchester Museum—  
Book: Tomb of two brothers, by A. Murray.
- Metropolitan Museum, New York, per J. H. Buck—  
Photographs of grate backs.
- Miss MacFerran—  
Panel of Irish embroidered linen.
- Chas. McNeill, Esq.—  
Collection of Greek sherds, from Tiryns.
- W. W. Mitchell, Esq.—  
Fifty-cent note.
- Miss E. Draper Newman—  
Specimens of Dublin bookbinding.
- Nyasaland Protectorate—  
Set of postage stamps.
- Pennsylvania Museum—  
Quarterly Bulletin.
- Miss A. Peter—  
Impressions from D. Garrick's seal.
- Her Majesty Queen Alexandra—  
Book: Arms and armour at Sandringham.
- Government of Rhodesia—  
Set of postage stamps.
- H. Smith, Esq.—  
Leather shoe, Irish.
- Major H. Trevelyan—  
Photograph of the Fiddler's Stone, Castlecaldwell.
- E. E. West, Esq.—  
Photographs of commissions, 1689.
- Trustees of the Wallace Collection—  
Illustrated catalogue.
- M. S. Dudley Westropp—  
Decanter marked "Cork Glass Co."  
West African head rest.  
Brass admission ticket, Royal Dublin Society.
- Mrs. A. K. Wynne—  
Specimens of modern Portuguese lace.

## (c) LIST OF LOANS,

- J. T. Andrews, Esq.—  
Collection of Chinese porcelain, miniatures, etc.
- E. C. R. Armstrong, Esq.—  
Ushabti figure.
- Miss Bastable—  
Collection of silver plate.
- A. Bell, Esq.—  
Chaco.
- Montague Yeats Brown, Esq.—  
Collection of porcelain.
- W. J. Campbell, Esq.—  
Collection of Mexican antiquities.
- Rev. Ambrose Coleman—  
Silver chalice, etc.
- Lt.-Col. J. J. Cronin—  
Collection of Burmese objects.

- Frank Falkner, Esq.—  
Collection of English pottery figures.
- Mrs. M. Finucane—  
Collection of Thibetan objects.
- C. E. Henning, Esq.—  
Punch Ladle.
- Miss Hogan—  
Certificate and uniform belonging to John Hogan.
- Lt.-Col. Davidson Houston—  
Collection of West African objects.
- Talbot Hughes, Esq.—  
Collection of costumes.
- Mrs. Dames Longworth—  
Collection of porcelain, etc.
- J. B. S. MacIlwaine, Esq.—  
Collection of porcelain, lace, etc.
- J. Mulhall, Esq.—  
Collection of Irish silver.
- Miss Neill—  
Officer's coat, Londonderry militia.
- L. O'Callaghan, Esq.—  
Porcelain bowl.
- Thos. O'Connor—  
Father Mathew medal.
- P. J. O'Reilly, Esq.—  
Book, with signature of Samuel Ferguson.
- Basil Orpin, Esq.—  
Carved wood figure.
- Count Plunkett.—  
Harp, by Cousineau, Paris.  
Plaster bust of O'Connell, by Hogan.
- St. Columba's College—  
Collection of plate.
- Mrs. M. L. J. Stack—  
Oak armoire and chest.
- Victoria and Albert Museum—  
Collection of textiles.
- War Office—  
Collection of muskets and rifles.
- H. Bantry White, Esq.—  
Silver spoon.

#### APPENDIX IV.

##### REPORT OF THE KEEPER OF THE NATURAL HISTORY COLLECTIONS.

The arrangement in the lower hall of the Natural History building of the Collection representing the Irish fauna has now been partly accomplished, but much remains to be done before the work is completed, owing to the lack of funds for the necessary fittings. Groups of the otter, fox, and badger, with their young, which are now exhibited among their natural surroundings, not only attract those interested in the habits and life history of animals, but Art students now come more frequently than in former years to sketch these and other groups.

My suggestion as to the establishment in the Museum of a room where specimens can be handled and closely examined by students has been acted upon, and has been a great success. Research students, who want assistance from the staff, come to the private office as heretofore, but the ordinary University and College student now studies in the Student's room. It was opened on the 19th May, 1910. By the end of March, 1911, the room had

been used by 676 students, most of whom belonged either to the National University or the Veterinary College.

For the purpose of identifying specimens, for records of captures and for the general research students, large series of skins and skeletons of birds and mammals, and very extensive collections of spirit specimens of fish and invertebrates, many of them collected by the Fisheries Branch of the Department, have to be carefully preserved, as well as all the duplicates used for exchange with other Museums. For the spirit specimens an underground store has been built, but the space in this is quite insufficient for our requirements, while for the housing of the remaining collections no adequate provision has been made. I also urged in my last report that a special attendant might be appointed to keep these collections in order and free from dirt and dust, and I greatly regret that this suggestion has not been acted upon. Meanwhile even the general collections suffer from being over crowded. More room is therefore urgently needed, not only for the students' collections but for the collections exhibited to the general public.

As regards dealings with other scientific institutions, we have effected some exchanges of zoological and geological specimens with the Museum of University College, London, with the Museums at Washington, Copenhagen, and Hamburg, as well as with the Prince of Monaco's Museum. Numerous temporary loans to scientific institutions have likewise been made.

Mr. Southern having been transferred, at his own request, to the Fisheries Branch of the Department, a vacancy has arisen which, it is to be hoped, will soon be filled, as it is extremely difficult for the small staff to cope with the large amount of work. I may mention that one of the most beautiful pieces of work ever produced in the Museum was done entirely under Mr. Southern's direction. It is the model of a rock-pool in which a liquid, never hitherto used in this manner, was successfully employed for the preservation of the animals contained in the group. The model has been greatly admired, and it certainly is far superior to anything of the kind attempted elsewhere.

I had the great privilege of being permitted last year to visit the Museums of Frankfort, Prague, and Vienna, on my way to the International Zoological Congress held at Graz in Austria, and I was able to inspect a number of beautiful objects suitable for the Students' Collection and to recommend their purchase. I also visited London in the Spring with a view to inspecting various specimens offered for purchase, while Miss Stephens was permitted to study and compare sponges at the British Museum.

I have alluded in former reports to the fact that the Library connected with the Natural History Collections had increased to such an extent, that a room would soon be required to accommodate the books and pamphlets. Most of the latter have been presented by the authors or by the institutions under whose auspices they were published. A complete card catalogue arranged under the authors and subjects has recently been made. The Natural History Library on the 1st of January, 1911, contained 2,426 books and 3,949 pamphlets.

In order to facilitate the scheme of Museum lectures which was started last winter, a small collection of lantern slides is being added, while the collection of slides of Microscopic objects has greatly increased. All this material, along with many special collections of dried specimens, is now accommodated in the private offices, filling up almost all available space.

The Natural History staff was largely engaged during the past year in completing some reports for the Fisheries' Branch of the Department, and in working out the specimens collected by the Clare Island Survey Committee.

The following reports have been published during the year:—

- A. R. Nichols : Polyzoa from the Coasts of Ireland. Scient. Investigations, 1910. Dept. of Agri. and Tech. Inst., Ireland.
- R. Southern : Polychaeta of the Coasts of Ireland, part III. Scient. Investigations, 1910. Dept. Agri. and Tech. Instr. Ireland.

The more important purchases included Irish and foreign bird skins, a collection of Microscopical slides of Rotifers, a fine skull of the Extinct Sabre-toothed Tiger from California, and an enlarged model of the House-fly.

I beg leave herewith to submit a list of the donations registered by me during the past year.

R. F. SCHARFF.

# DONATIONS OF BOOKS AND PAMPHLETS, 1910-1911.

- Andersson, G.—  
Pamphlet.
- Ashworth, J.H.—  
The Annelids of the Family Arenicolidae of North and South America. Washington, 1910.
- Australian Museum, Trustees of—  
Records. Vol. II., Nos. 2, 3; Vol. III., No. 3; Vol. IV., Nos. 1, 2, 3, 4, 5, 6, 7, 8; Vol. V., Nos. 1, 3, 4, 5; Vol. VI., Nos. 1, 2, 3, 4, 5; Vol. VII., No. 5; Vol. VIII., No. 2. Sydney, 1892-1911.
- Bendl, W. S.—  
Pamphlet.
- Bolton, H.—  
Pamphlet.
- British Museum, Trustees of—  
National Antarctic Expedition. Natural History, Vol. V. Zoology and Botany. London, 1910.  
Catalogue of the Lepidoptera Phalaenae in the British Museum, Vol. IX., and plates. By Sir G. F. Hampson, Bart.  
A Synonymic Catalogue of Orthoptera, Vol. III. By W. F. Kirby. London, 1910.  
Catalogue of British Hymenoptera of the Family Chalcididae. By Claude Morley. London, 1910.  
Guide to the Crustacea, Arachnida, Onychophora, and Myriopoda exhibited in the Department of Zoology, British Museum (Nat. Hist.). London, 1910.  
Guide to the British Vertebrates exhibited in the Department of Zoology, British Museum (Nat. Hist.). London, 1910.  
A Monograph of the Culicidae or Mosquitoes, Vol. V. By F. V. Theobald. London, 1910.  
Monograph of the Okapi. Atlas. By Sir E. Ray Lankester. London, 1910.  
Catalogue of the Books, Manuscripts, Maps and Drawings in the British Museum (Nat. Hist.), Vol. III. London, 1910.  
A Descriptive Catalogue of the Marine Reptiles of the Oxford Clay, Part I. By C. W. Andrews. London, 1910.
- Bruce, W. S.—  
Pamphlet.
- Burkill, J. H.—  
Pamphlet.
- Carpenter, Prof. G. H.—  
Two Pamphlets.
- Caziot, E.—  
Three Pamphlets.
- Coffey, G.—  
Pamphlet.
- Cooke, W. W.—  
Distribution and Migration of N. American Shore-Birds. Washington, 1910.
- Cummings, B. F.—  
Pamphlet.
- Enock, F.—  
Pamphlet.

- Field Museum of Natural History, Trustees of—  
Publications 139, 140, 141, 143, 144, 146, 147. Chicago, 1910.
- Freeman, D. W.—  
Three Pamphlets.
- Garwood, E. T.—  
Two Pamphlets.
- Gilbert, J. Z.—  
Pamphlet.
- Hedley, C.—  
Pamphlet.
- Hoyle, W. E.—  
Two Pamphlets.
- Indian Museum, Trustees of—  
Catalogue of the Indian Decapod Crustacea in the Collection of the  
Indian Museum. Part I, Fasc. II. By A. Alcock. Calcutta,  
1910.  
Annual Report (Nat. Hist. Section) for the Year 1909-10.  
An Account of the Shallow-Water Asteroidea. By P. Koehler.  
Calcutta, 1910.
- Jackson, J. W.—  
Two Pamphlets.
- Knight, G. A. F.—  
Pamphlet.
- Longstaff, Mrs. G. B.—  
Pamphlet.
- Manchester Museum.—  
Outline Classification of the Animal Kingdom. Manchester, 1911.
- March, M. C.—  
Pamphlet.
- Matthew, W. D.—  
Pamphlet.
- Milwaukee Public Museum, Trustees of—  
Twenty-seventh Annual Report. Milwaukee, 1910.  
Bulletin, Vol. I., Article I. Milwaukee, 1910.
- Naples, University of—  
Annuario del Museo Zoologica della R. Università di Napoli, Vol. 3,  
Num. 1-12. Napoli, 1909-10.
- Nichols, A. R.—  
Two Pamphlets.
- Northumberland Sea Fisheries Committee—  
Report on the Scientific Investigations for the Year 1909, and to  
June 15th, 1910. Newcastle-on-Tyne, 1910.
- Nova Scotian Institute of Science—  
Proceedings and Transactions, Vol. XII., part 2. Halifax, 1910.
- Pace, S. and R. M.—  
Contributions from the Bureau of British Marine Zoology. Pub-  
lication 3. London, 1910.
- Patten, Prof. C. J.—  
Three Pamphlets.
- Royal Irish Academy—  
Proceedings. Vol. XXVIII., Section B., Nos. 6, 7, 8; Vol. XXIX.,  
Section B., Nos. 2, 3, 4. Dublin, 1910.
- Royal Zoological Society—  
American Museum of Natural History:—41st Annual Report, for  
the Year 1909. New York, 1910.  
Comm. de Estudos das Minas de Carvão de Pedra do Brazil. Final  
Report. Rio de Janeiro, 1908.
- Ruthven, A. G.—  
Two Pamphlets.
- Schaeffer, C.—  
Additions to the Carabidae of North America. Brooklyn, N.Y.,  
1910.

Scharff, Dr. R. F.—

Rhizopodes d'eau douce. Brit. Antarc. Exped., 1907-9. By E. Penard. London, 1911.

Forty-four Pamphlets.

Secretary of State for India—

Fauna of British India:—Coleoptera. Lamellicornia, Part 1. By G. J. Arrow. London, 1910.

Sedgwick Museum, Cambridge—

Forty-fourth Annual Report of the Museum and Lecture Rooms Syndicate (for 1909). Cambridge, 1910.

Sheppard, J.—

Pamphlet.

Smithsonian Institution—

U.S. National Museum:—

Bulletins, 71, 72, 73, 74.

Proceedings, Vol. 37. Washington, 1910.

Cambrian Geology and Palaeontology, No. 6. By C. D. Walcott. Washington, 1910.

Société Portugaise des Sciences Naturelles—

Vol. III., Fasc. 1, 2, 3, 4, Suppléments 1, 2; Vol. IV., Fasc. 1, 2, Lisbonne, 1909-11.

Southern, R.—

Thirteen Pamphlets.

Stebbing, Rev. T. R. R.—

Scientific Results of the Trawling Expedition of H.M.C.S. "Thetis." Crustacea, Part V. Amphipoda. Sydney, 1910.

Weber, Max—

Pamphlet.

Welch, R.—

Five Pamphlets.

Woodward, A. S.—

One hundred and sixteen Pamphlets.

#### DONATIONS OF SPECIMENS, 1910-1911.

Alexander, Dr. A. G.—

Small Collection of Insects from Northern Nigeria.

Barrett-Hamilton, Major G. E. H.—

Lesser Horse-Shoe Bat (*Rhinolophus hipposideros*) from Great Cheverell, Devizes.

Bedford, Duchess of—

Skin and Skull of European Bison (*Bison bonasus*) from Russia.

Blood, B. N.—

Dipper (*Cinclus cinclus hibernicus*) from the Dargle, Co. Wicklow.

Board of Works, H. M.—

Lesser White-fronted Goose (*Anser erythropus*) from N. Asia.

Bristow, Mrs.—

*Vanessa antiopa* from Belfast.

Campbell, D. C.—

Small Collection of Lepidoptera, and Nests of *Aethorhynchus* and *Zosterops* from Southern India.

A few rare shells from Andaman Islands.

Sponge (*Spongilla carteri*) and Nests of Lesser Barbet and Indian Swiftlet from India.

Carpenter, Prof. G. H.—

Reindeer Warble-Fly (*Oedemagena tarandi*) with larvae and pupae from Zoological Gardens, Dublin.

Hymenopteron (*Megastigmus strobilobius*) from Avondale, Co. Wicklow.

Sea Spider (*Nymphon maculatum*) from the Red Sea.

- Christopher, J.—  
Black Rat (*Mus rattus*), adult and young from Dungarvan, Co. Waterford.
- Cooke, J.—  
Trout from Lough Melvin, Co. Leitrim.
- Cree, Miss C. S.—  
Specimens of *Elona quimperiana*, etc., from Forest of Quimperlé, Finisterre, France.
- Cronin, Lt.-Col. J. J.—  
Egg of Cassowary (*Casuarius australis*) laid at Rangoon Zoological Gardens.
- Cunningham, Jack—  
Five tubes of poison of Scorpion and Snakes, and Fangs of Russell's Viper, from India.
- Darling, J. Holliott.—  
Little Grebe (*Podiceps fluviatilis*) from Lough Corrib.
- Delap, Miss M.—  
A large Sabellid Worm (*Bispina voluticornis*) from Valentia.
- Dillon, R. E.—  
Irish Hare (*Lepus timidus hibernicus*) from Castlegar, Co. Galway.
- Dixon, Prof. A. F.—  
Collection of Skulls from Bogs and Rathes and a few recent skulls (probably Irish).
- Dollman, H. C.—  
Small Collection of Coleoptera from England.
- Dublin Steam Trawling Company—  
A large specimen of Norway Lobster (*Nephrops norvegicus*) from Dublin Bay.
- Eassie, Major F.—  
Skeleton of Pony.
- Foster, N. H.—  
Four specimens of *Trichoniscus stebbingi* from Hillsborough, Co. Down.
- Goddard, Mrs. Norris—  
Two specimens of Great Crested Grebe (*Podiceps cristatus*) from Lough Derg, Co. Galway.
- Grant, Col. C. C.—  
Collection of Silurian and Devonian Fossils from Canada.
- Hackett, Rev. E. A.—  
Skull of Young Bottle-nosed Whale (*Hyperoodon rostratus*) from Ventry, Kerry.
- Halbert, J. N.—  
Four specimens of *Metoponorthus melanurus* from Howth, Co. Dublin.
- Hamilton, Major W. J.—  
Two specimens of Beetle (*Sinodendron cylindricum*) from Castle-Hamilton, Killeshandra, Co. Cavan.
- Hamilton, W. R. G.—  
Barn Owl (*Strix flammea*) from Edenderry, King's County.
- Handlirsch, Anton—  
Fossil Wasp's Nest (*Eumenis romeri*) from Upper Oligocene of Flörsheim, Germany.
- Hardy, J. R.—  
Nine specimens of Stratiomyid Fly (*Hermetia illucens*) and four larvae, from Para, Brazil.
- Hassett, Ed.—  
Kestrel (*Falco tinnunculus*) from Carrick-on-Suir.
- Headley, Lord—  
Buff variety of Rat (*Mus decumanus*), male and female, from Galway.
- Hogg, Rt. Hon. Jon.—  
Six Humming Birds from Rio de Janeiro.

- Jackson, J. W.—  
Pleistocene Animal Remains from Ightham Fissures, Kent.  
Collection of Animal Remains from Warton, Lancashire.  
*Unio sinuatus* from Mortlake.
- Kelly, Geo. A. P.—  
Set of upper teeth and some skull fragments of Irish Elk from Cloon-  
glasnynore, Strokestown, Co. Rosecommon.
- Kelsall, Capt. T. E.—  
Young Coot and a few Birds' Eggs from S. Spain.
- Kennard, A. S.—  
Collection of shells and three flint flakes from Ingress Valley Pit,  
near Swancombe, Kent.
- Kew, H. Wallis—  
False Scorpion (*Obisium carpenteri*) from Clengariff.  
Small Collection of False Scorpions and Insects from Clare Is., Co.  
Mayo.
- Knowles, Miss M.—  
Variety of Field Mouse (*Mus sylvaticus*) from islet off Angleinish,  
River Shannon.
- Longstaff, Mrs.—  
Small collection of Molluscs from Australia and New Zealand.
- Lynch, Richard—  
Long-horn Beetle (*Chion cinchus*) found in oak staves at the Mount-  
joy Brewery, Dublin, and a piece of injured wood.
- Mackay, A. H.—  
Part of Type specimen of *Heteromeyenia macconi* from Sable Island,  
N. America.  
Collection of Freshwater Sponges from Nova Scotia.
- Michaelsen, Dr. W.—  
Two species of Gephyrea (*Aspidosiphon*) from W. Africa.
- Minchin, Prof. E. A.—  
Three specimens of *Clathrina contorta* from Banyuls, France.
- Morley, Claude—  
Collection of Hymenoptera from Clare Island and Co. Mayo.
- O'Rlain, Linn—  
Kingfisher (*Alcedo ispida*) from Kilkenny.
- Pack-Beresford, D. R.—  
*Trichorhina tomentosa* from Botanic Gardens, Belfast.
- Patten, Prof. C. J.—  
Hare (*Lepus timidus hibernicus*) and thirty-six skins of Birds from  
Clare Island.
- Patterson, Capt.—  
Four Whalebone plates from Whales caught off Inishkea, Co. Mayo.
- Penard, Dr. E.—  
Collection of Microscopical Slides of Rhizopoda from Clare Island  
and Co. Mayo.
- Percival, J. J.—  
Cadwall (*Anas strepera*) from Wexford Harbour.
- Perrin, R. C.—  
*Spatangus purpureus* and two specimens of *Echinus esculentus* from  
six miles off Greystones, Co. Wicklow.
- Power, Mrs. F. M.—  
Collection of Exotic Lepidoptera.
- Rathborne, H. B.—  
Alpine Accentor (*Accentor collaris*) from S. Europe.
- Sims, Mrs.—  
Barnacles (*Balanus balanoides*) on Coconut from 18 miles off Lam-  
bay Island, Co. Dublin.
- Smith, H. V. Crawford—  
Horn-Core of Goat (*Capra hircus*) and Skull of Dog, from three to  
four feet below the surface at Sandymount, Co. Dublin.



- Smith, H.—  
Four specimens of Tipulid (*Otenophora ornata*) from New Forest, Hampshire.  
*Ornithomyia lagopodis* from Thulachan, Caithness.  
Dipteron (*Cyclopodia sykesii*) from Barberyn Is., West Coast of Ceylon.
- Stelfox, A. W.—  
*Vertigo lilljeborgi* from Glenade, Co. Leitrim.  
Moth (*Nyssia zonaria*) from Beltnullet.
- Strong, Capt. H. W.—  
Large Spider from Sierra Leone.
- Swan, Alan P.—  
*Petromyzon marinus* from Dundalk.
- Usher, Mrs.—  
Jay (*Garrulus glandarius hibernicus*) from New Ross, Co. Wexford.
- Usher, R. J.—  
Human Skull with incomplete lower jaw, from Kitchen-midden, Inishkea, Co. Mayo.  
Animal remains from Kitchen-middens, Rosapenna, Co. Donegal.
- Wailles, G. H.—  
Microscopical Slide of *Nabela bipes* from Sraheens Lough, Achil Is.
- Watson, J. H.—  
Two specimens of *Philisamia ricini*.
- Wear, Miss—  
Two humeri of Great Auk (*Alca impennis*) from Kitchen-middens, Rosapenna, Co. Donegal.
- Welch, R.—  
Small Collections of Sponges, Land Shells, etc., chiefly Irish.
- Welch, R., and R. Li. Praeger—  
Small Collection of Insects from the Bills off Clare Island.
- Wise, Bonaparte—  
A Blue-winged Teal (*Querquedula discors*) shot in South-east of Co. Cork. First Irish Specimen.
- Wright, E. P., Executors of the late—  
Small collection of Coleoptera and Diptera, chiefly Irish.

## LOANS.

- Chute, Capt.—  
Temminck's Stint (*Tringa temminckii*) in winter plumage, killed January, 1848, at Blennerville, Tralee, Co. Kerry.
- Hunter, R. Hamilton—  
Nest and eggs of Wood Wren (*Phylloscopus sibilatrix*) from Derrybawn Woods, Co. Wicklow.

## APPENDIX V.

## REPORT OF THE CUSTODIAN OF THE BOTANICAL DIVISION.

## HERBARIUM.

The number of students consulting the collections during the past year is 344, many being frequent visitors. Numerous specimens have been identified for correspondents, and reports also have been supplied to the Department's Seed-Testing Station on weeds, etc.

Miss Knowles has given all her available time to the investigation of the Lichens of Clare Island and district, and also spent the month of March at the Natural History Museum (British Museum) London, in consultation with Miss A. Lorrain Smith, F.L.S., regarding her collections. These, when worked out, will be incorporated in the Museum collections.

## INDEX COLLECTION.

This collection, much used by students, needs extending. Its development is crippled by want of space which is occupied at present by specimens illustrative of plant-diseases.

## ECONOMIC COLLECTIONS.

*Rooms II.-IV.*

The contents have been arranged in the more commodious upright cases supplied in Room II., and Room IV. is being similarly re-cased.

The re-arrangement of the collection of fossil plants has been commenced and has already revealed several valuable additions to our knowledge of the Irish fossil flora.

*Room V.*

The lighting of this Room is very unsatisfactory.

T. JOHNSON.

## LIST OF DONATIONS.

Adams, J., M.A.—

Specimens of *Lecidea contigua* from the shores of Upper Lough Bray, and *Rhizocarpon petraeum*, Devil's Glen.

Barrington, Richard M.—

Two volumes of dried specimens of Seaweeds, being vols. 6 and 7 of John Reilly's Herbarium.

Director, Royal Botanic Gardens, Kew—

One hundred and four Economic specimens.

Moore, Sir F. W., Royal Botanic Gardens, Glasnevin—

Two samples of Fibre (1) *Phormium tenax* grown at Glasnevin.  
(2) The Sisal plant grown in Italy.

Salmon, C. E., Reigate—

Eight sheets of dried Foreign specimens of flowering plants. Eighteen sheets of dried specimens of British plants (critical genera).

Scully, Dr. R.—

Specimens of *Polygonum sagittatum*.

Thompson, H. Stuart, Dorset—

Five sheets of dried plants from Dorset.

Two sheets of *Hymenophyllum peltatum* from Co. Kerry.

Specimens of *Spartina Townsendi* from near Poole Harbour, Dorset, with three photographs showing the plant in situ.

Vaughan-Gwynn, Prof., F.L.S., Belfast—

Photomicrograph of section of *Sphallopteris schlectrudahlia* from Russian Permian rocks.

Waterfall, C., Hull—

Dried specimens of *Rubi* from Co. Dublin.

White, J. W., Bristol—

Dried specimens of *Lepidium heterophyllum* var. *leiocarpum* from West Gloucester.

## BOOKS AND PAMPHLETS.

Agricultural Gazette, New South Wales. Vol. XXL

Agricultural Ledger.

Baker, Richard F., F.L.S., and Henry G. Smith, F.L.S.—

A research of the Pines of Australia.

Barrington, R. M., F.L.S.—

Ninety-four Botanical Pamphlets.

- Board of Agriculture and Fisheries, England—  
 Leaflets 110, 137, 179, 207, 228, 230-232, 234-239, 243 and 244.
- Botanic Gardens and Government Domains, N. S. Wales—  
 Report for year 1909.
- Contributions from United States National Herbarium—  
 Vol. XIII., Nos. 2-7. Vol. XIV., Nos. 1 and 2.
- Cooke, Mrs., 5 Morehampton Road—  
 Atlas of Japanese Vegetation (Set VIII., 54-62).
- Imperial Department of Agriculture for West Indies.—  
 Nos. 63 and 64.
- Johnson, Prof., D.Sc., F.L.S.—  
 Agricultural Seeds and their Weed Impurities.
- Journal of the Board of Agriculture and Fisheries, England—  
 Vol. XVII.
- Journal of the Department of Agric. and Technical Instruction, Ireland.  
 Vol. X., Nos. 3 and 4; Vol. XI., Nos. 1 and 2.
- Louisiana State Museum, The—  
 Bulletin No. 1.
- Maiden, J. H., F.L.S., Royal Botanic Gardens, Sydney—  
 Critical revision of the Genus *Eucalyptus*. Vol. II., Nos. 1 and 2.
- Pethybridge, Dr. and J. Adams, M.A.—  
 Proceedings of the Royal Irish Academy, Vol. XXVIII., Sect. B.,  
 Nos. 4 and 5.
- Records of the Botanical Survey of India.—  
 Vol. IV., No. 4. and Vol. V., No. 1.
- Schimmel and Co., Leipzig—  
 Semi-Annual Report, October, 1910.
- Sutton and Sons, Reading—  
 The laying out of Golf Courses and Lawns. (2 Pamphlets).
- Tilden, Prof. Josephine—  
 Minnesota Algae, Vol. 1.
- Tropical Agriculturist, The, Ceylon—  
 Vol. XXIV., Nos. 4 and 6.
- Trustees of the British Museum—  
 Guide to Mr. Worthington Smith's drawings of Field and Cultivated  
 Mushrooms and Poisonous Fungi.
- West Indian Bulletin.—  
 Vol. X., Nos. 3 and 4. Vol. XI., Nos. 1 and 2.

## APPENDIX VI.

### REPORT OF THE CUSTODIAN OF THE MINERAL AND GEOLOGICAL COLLECTIONS.

Owing to the formation of a Students' Room in Annexe Room II., the collection of igneous and metamorphic rocks was transferred to Annexe Room III., where additional space was provided for these and for the minerals already arranged there. The collection of characteristic fossils was transferred to the care of the Keeper of the Natural History Collections, for use in the Students' Room, and a series of common minerals and typical models of crystals was arranged for the same room, so as to be accessible to students.

A series of minerals and rocks was arranged for deposit on loan at the Ringsend Technical School.

The new space available in Annexe Room III. allowed of the expansion of the Irish Mineral Series and the General Collection of Minerals, greatly to their advantage, since many specimens had previously been placed far back on the shelves, where proper lighting was impossible. Models of volcanic areas in the Mediterranean were suspended in the same room.

Among the additions made by purchase were :—

*Branching calcite* and a large block of crystallised *hemimorphite* from Mexico.

*Natite tantalum* from the Altai Mountains.

Large slab with *quartz* crystals from Kilmorna, Listowel.

A polished specimen of a *dyke of dolerite* penetrating granite and faulted, from Minnesota.

The following gifts were received :—

*Alluvial gold*, California; from Mrs. Gainfort.

Thirteen specimens of metallic ores and silicates from the Allihies, Blackball Head, and Kenmare area; from H. Walker, Esq.

*Gyrolite*, in basalt near Belfast; from R. Bell, Esq.

Six specimens of iron and manganese ores, Minas Geraes, Brazil; from J. C. Oakenfull, Esq.

*Linonite*, *rose quartz*, and six *lime-garnets*, Co. Donegal; from the Geological Survey of Ireland.

GRENVILLE A. J. COLE.

## APPENDIX VII.

### GEOLOGICAL SURVEY COLLECTIONS.

New wall-cases have been added where formerly a gap occurred in the series, and these have allowed of an extension of the collections illustrating special Memoirs of the Survey. Progress has been made with the economic collection, and a considerable series of stones used as road-metal in Irish counties was displayed, in time for the meeting of the Road Congress in Dublin in 1911. A number of fossils have been labelled and arranged in the wall-cases, in pursuance of the general scheme of remounting that has been adopted. A large block of fine-grained diorite and other specimens, dredged up off the west coast of Ireland, have been presented by the Fishery Branch of the Department.

GRENVILLE A. J. COLE,

*Director of the Geological Survey of Ireland.*

REPORT OF THE BOARD OF VISITORS  
OF THE  
NATIONAL MUSEUM OF SCIENCE AND ART, IRELAND,  
AND THE ROYAL BOTANIC GARDENS, DUBLIN.

*For the Year ending 31st March, 1911.*

TO THE DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

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The Board of Visitors submit the following as their Report for the year ending 31st March, 1911.

### NATIONAL MUSEUM.

On the 12th April, 1911, the Visitors having invited the attendance of the Director, Count Plunkett, made their annual inspection of the Museum.

Before considering the different divisions in detail they desire to present the following general observations:

The Visitors notice with regret that there has been a continued decrease in the attendance of the public. The number who passed through the turnstiles in 1910-1911 was 270,881, as against 279,825 in the previous year, the decrease being 8,944. They are, however, pleased again to observe that the number of serious students who make use of the Museum is rapidly increasing. This year the numbers recorded were 706 in the Natural History Division, 354 in the Botanical Division and about 50 in the Art Division, including 30 students from the School of Art who are constantly studying the collections under the supervision of a teacher, making altogether 1,110 as against 794 last year. In addition to these there are the large number of students who attend courses of Lectures on artistic subjects in the School of Art which are illustrated by specimens sent from the Museum for the purpose, so that the number of students in the School of Art who practically benefit by the Museum is very considerable.

The Visitors note with pleasure that the Committee of officers have arranged for the publication, quarterly, of articles on subjects connected with the Museum by members of the staff, that the Department has agreed to publish these contributions in the first instance as part of its Journal, and subsequently to reprint the articles in pamphlet form as a

Museum Bulletin for distribution among other Museums. The Visitors believe that this will have the great advantage of making the collections more widely known.

The following Parts and Chapters of the General Guide to the Art Collections have been published during the year:—

- Part VII. Chapter III. French Pottery (illustrated).  
 „ VIII. „ III. English Furniture (new edition).  
 „ IX. „ II. Medals (illustrated).  
 „ XV. Ivories (new edition, illustrated).

An illustrated catalogue of the Falkner Loan Collection of Pottery has also been published.

In the Botanical Division a Hand List of the Irish Flowering Plants and Ferns has been published.

The Halfpenny Short Guide to the Museum is in its forty-ninth edition.

A second edition of the Illustrated Guide to the Celtic Antiquities of the Christian Period has been published by the Royal Irish Academy and is now on sale.

The Visitors learn with satisfaction that the following recommendations contained in former Reports in reference to the staff of the Museum have been adopted:

Arrangements have been made by which the amount of time Professor Johnson is enabled to devote to Museum work has been very largely increased, and the Museum now receives his full time services during about eight months in the year, instead of about one hour per day as was previously the case.

The Treasury has also adopted their recommendation by increasing the emoluments of Mr. Dudley Westropp, and placing him in a more permanent position.

The Visitors learn with satisfaction that the Department has given Miss Knowles an opportunity of studying Cryptogamic Botany (lichens) under Miss Lorrain Smith at the British Museum, by which her usefulness in the Museum will be increased.

The Visitors are strongly of opinion that Miss Knowles's salary should be raised, and they are confident that the authorities will agree that the responsibility of her position and the character of her work have not, so far, received proper recognition, as pointed out in former Reports.

The Visitors are glad to learn that a portion of the Temporary Annexe has been fitted up as a Lecture Theatre, and that the Director and staff of the Museum have organised a course of Lectures on the following subjects, illustrated by the collections:—

- COUNT PLUNKETT . “The National Museum.”  
 PROFESSOR COLE . “Volcanoes as illustrated by the  
 Models in the Museum.”

DR. SCHARFF	.	"Animals of Ireland."
PROFESSOR JOHNSON	.	"Irish Types of the World's oldest land Plants."
MR. BUCKLEY	.	"Hand-made Lace."
MR. ARMSTRONG	.	"The Early Portion of the Bronze Age."

Three of these Lectures were delivered in March last and were very well attended, the average attendance being 101 per Lecture. The Visitors welcome this departure as an important one which should be of great utility by drawing public attention to the advantages which may be obtained from a serious study of the collections. These Lectures impose a considerable amount of extra labour on the members of the staff, who are already fully occupied, and have therefore to prepare for, and deliver, the Lectures after official hours. The Visitors trust that considering the usefulness of the object attained, the Department may be able to obtain for the Lecturers some extra remuneration.

As regards the buildings of the Museum, the Visitors note with satisfaction that an additional portion of the basement of the new Museum building has been cleared and fitted up as a temporary exhibition gallery for the Loan Collection deposited by the Royal Society of Antiquaries of Ireland.

The Visitors have again to call attention to the want of a proper office and workroom for the Keeper of Irish Antiquities, and they regret to find that no attention has been paid to their former recommendations. The room on the first floor which is now used as an office is urgently required for exhibition purposes. The Visitors, with the assistance of the late Sir Thomas Drew, submitted a scheme which could have been carried out at a moderate expense, and which would have attained the desired object.

The Visitors regret to learn that the scheme for the erection of a new wing across the east side of Kildare Place has been postponed until after the completion of the public offices in Merrion Street. This wing is urgently required so as to bring the Botanical and Geological exhibits into close proximity to the Zoological collections, and they trust the Department will use their influence with the Treasury to have this work put in hands without delay.

The Visitors have again to call attention to the leaky condition of the roofs and skylights of the Temporary Annexe. They see no reason why these roofs should not be put into proper repair; their present condition is unseemly in an institution such as the Museum, and a danger to the valuable contents of the galleries.

The walls of some of the rooms in the new Museum buildings, notably the Music Room, No. VII., Ground Floor, and the

Japanese Room, No. VII., First Floor, are in a damp condition and demand immediate attention

The Visitors renew the recommendations contained in their previous Reports that the skylight in Room V. in the Botanical Division should be increased in size so as to admit more daylight, and they also suggest that platforms should be erected in Rooms III. and V., so as to bring the workers with microscopes on a level with the sills of the windows. This is required, as, owing to the height of the windows from the floor, microscopic work, which is of the greatest importance in the Botanical Division, is impeded.

The Visitors are still of the opinion expressed in their Report of last year that in view of the increased accommodation provided in the Museum for exhibition purposes, the number of Attendants is too small to adequately protect the collections and keep the furniture and fittings in proper order.

The Visitors again point out the desirability of having the Courtyard paved with asphalt, wood, or some other suitable material, in order to minimise the amount of dust, mud, and gravel carried into the buildings by wind and on the feet of visitors, and they understand that a similar recommendation has been made by the Council of Trustees of the National Library.

The Visitors again call the attention of the Department to the inadequate amount provided for purchase of specimens, which has to be spread over such a very large field as that covered by the Museum.

The Visitors note with pleasure that they have had the assistance of Mr. White, the Chief Clerk and Second Officer of the Science and Art Institutions, in the preparation of the present Report by the extension of his term of office from 24th February to 30th September. Mr. White has been in the public service since the 28th September, 1864, and he was appointed by this Board as its Secretary on 26th April, 1882. For the long period of twenty-nine years the Board have had the advantage of his intimate acquaintance with the circumstances and practical working of the Museum, and they deeply regret that the Rules of the Civil Service necessitate his retirement from the post of Secretary to the Board.

#### ART COLLECTIONS.

Central Court.—The indefinite postponement of the building of a New Wing prevents any radical change in the arrangement of this portion of the Collection. A notable collection of English Pottery Figures, lent by Mr. Frank Falkner, recently exhibited at Salford, is displayed in five cases. An instructive Catalogue, profusely illustrated, of this Loan Collection, is on sale at the Museum. The Visitors wish to testify their appreciation of the kindness of Mr. Falkner in lending so interesting an exhibit, and to congratulate the Director on its acquisition.



A Loan Collection of Embroideries and Ecclesiastical Vestments from the Victoria and Albert Museum is also displayed in the Central Court. Among recent acquisitions is a reproduction of a portion of Stained Glass Window in Winchester College Chapel.

Lower Gallery.—The Visitors note with satisfaction Miss Bastable's loan of a collection of small Table Silver, and Mr. Talbot Hughes's collection of French Costumes.

The re-arrangement of the Coins and Medals, to which attention was called in the last Report, has been completed. Mr. Dudley Westropp is to be congratulated on the arrangement of the collection, and on the completion of the excellent Illustrated Catalogue that he has compiled. Some additions have been made to the section devoted to French Medals and Plaquettes of the Roty School.

The Speaker's Robe of the Irish Parliament worn by Lord Oriel, and a Freedom Box of the City of Dublin, 1741, are important additions.

Room VII., Ground Floor.—No important additions have been made to the collection of Musical Instruments.

Room VIII., Ground Floor.—No change.

Room X., Ground Floor.—No change.

Gallery.—A Loan Collection of Miniatures, the property of Mr. J. T. Andrews, is on view in the Gallery. The Collection of Lace has been added to, and the Visitors hope that the expansion of this most useful exhibit will not be checked for want of space.

Rotunda Gallery.—Some Cartoons of Stained Glass Windows have been added to the walls of the Rotunda Gallery, but the ultimate arrangement of this portion of the Gallery appears to be still under consideration.

With regard to the Collection of Silver, the Visitors would like to suggest the possibility of entering into negotiations with the Director of the National Gallery regarding the ultimate transfer of the Silver in the Milltown Collection to the National Museum.

Room V., First Floor.—The Collection of Weapons has been re-arranged, but their proper exhibition is hampered by want of space.

Room VII., First Floor.—A fine suit of Japanese Armour has been recently acquired.

Room VIII.—The Longfield Collection is on view in this Room, pending its distribution among the general collections.

A valuable Collection of Nailsea Glass, and some specimens of Irish Glass have been added. There is also a Loan Collection of Chinese Porcelain lent by Mr. J. T. Andrews. The Visitors are glad to recognise Mr. Andrews' kindness in allowing this collection, as well as the Collection of Miniatures referred to above, to be placed on view.

Room IX., First Floor.—A Collection of Chinese Costumes in miniature has been added.

Room X., First Floor.—The Collection of Photographs of Lace has been increased.

Passage Room I.—The Lord Dunraven Collection of Architectural Photographs has been completed.

#### ETHNOGRAPHICAL COLLECTION.

This Collection is at present housed in Room III. on the Ground Floor. There is little to say that has not been already recommended, want of space preventing Mr. Buckley, the Keeper, from showing some of the objects at all, and from showing any of them really adequately. To some extent this will be improved by the proposed arrangement of a continuous case along the principal wall; the Visitors however recommend very strongly that the pilasters along that wall be removed, and so avoid the loss of 8 inches of floor space the whole length of the gallery. The Visitors understand that this was recommended before, but the Board of Works objected on the ground that should this long case ever be removed, the appearance of the gallery would be spoiled. The Visitors have no hesitation in saying that on the contrary the room would be very much improved were these pilasters removed and corbels arranged to take their place. But this new arrangement will only enable Mr. Buckley, the Keeper, to display better the objects in the existing cases, and the Visitors cannot see where room is to be found for Dr. Usher's collection and part of the Davidson-Houston collection now in store, and how it is possible to accept specimens or collections such as the Cingalese objects which it is believed have been offered through Captain Wilkinson. The Visitors note the loan of a small collection of Mexican Antiquities in Bronze, Stone and Pottery, by W. J. Campbell, Esq.

#### EGYPTIAN COLLECTION.

In Room II. there is no available space for the additions from the Egyptian Exploration Fund which are at present not arranged. On the other hand, the Visitors think that much of the stuff sent, which is mainly of pottery and very fragmentary, is practically useless from an educational point of view, and the Visitors think the Director might quite reasonably ask that fewer of these should be sent, and, if possible, one or two more important objects substituted.

#### GREEK AND ROMAN ANTIQUITIES.

Room I. is very much crowded, and the collections suffer accordingly. The Visitors note a collection of Early Minoan and Cretan objects, lent by Professor Father H. Browne of the National University, which represents the link between Egyptian and Grecian Art from 3500 B.C. or thereabouts, and

which he has deposited in return for the facilities shown to his pupils for study by the Museum. The Visitors think it is eminently satisfactory that there should be this give and take between the University and the Museum.

The Visitors are of opinion that the casts of the Classical Statues at present in the Rotunda would be of more use if removed to some place where students would have some chance of studying them, and they suggest that it might be possible to place them in the big Annexe together with other casts of statuary, Egyptian, Classical and Italian Renaissance, in order to show the development of that art through different periods, and in different countries. If that could be arranged, they would further suggest placing the Foley and Hogan casts in the Rotunda, and bringing down from the gallery to the ground floor of the Central Hall the Celtic Crosses and casts of Irish Architecture. There would thus be a certain amount of consistency in the Central Hall, which tends to be overcrowded with casts of all styles. To do this it would be necessary to remove the Engineering Models from the Annexe but the Visitors imagine that the greater part of these are long superseded, and quite useless for any purpose.

The Circulation Cases would also have to be removed; and as they are birds of passage it would be better to have them on walls less well lit than those of the Annexe, which are admirably suited for the permanent arrangement of casts. The Visitors think that they could be quite well shown in the temporary building used as a lecture theatre, or better if another temporary building were erected close to the Lecture Theatre on the vacant site at the rear of the Engineering School of the new College of Science.

#### INDUSTRIAL COLLECTIONS.

These Collections remain practically in the same condition as when reported upon last year. There do not appear to have been any additions of importance, nor does it seem to be possible to accommodate anything more in the limited space available, which is already overcrowded.

#### CIRCULATION COLLECTIONS.

The decrease in the use made by various Bodies of these Collections, noticed in last year's Report, appears to continue.

The number of cases issued during the year was 472, being a decrease of 117, as compared with the year before.

There were eight new cases added during the year, mostly connected with the industrial portion of the work and artistic crafts, the total number of cases now available being 326.

The Visitors are sorry to have to call attention to the falling-off in the use made of these cases and hope that steps may be taken to encourage Institutions interested in the various crafts illustrated to take more advantage of these Collections.

## IRISH ANTIQUITIES.

The Collection, though but few alterations have taken place since last year in its arrangements, has, during the interval, been enriched by many valuable additions. We need do little more than enumerate the principal of these. A set of gold lunulae, found in County Cavan, was recently purchased. A set of stone moulds has been purchased from Mr. S. F. Milligan; one of them is of unique interest, being intended to cast sickles of a pattern found on the Continent of Europe but hitherto unknown in the British Isles. Mr. Richard J. Ussher, of Cappagh, County Waterford, presented a set of objects from the hut sites, middens and shell mounds of Iniskea, County Mayo. Dr. Colley March has also made a very acceptable presentation, in view of the rarity of recorded finds in the primitive forts of Ireland and of the importance of the enclosure in which the objects were found, Dun Aengusa in Aran. It consists of (1) the hinged ring of a bronze pin, the acus is missing, but it has a cable pattern and a socket for setting some object. The Museum hitherto had only an inferior specimen. There is one perfect example (5th to 10th century) in the British Museum; (2) a leaf-shaped arrow-head of chert; and (3) a small worked flint. Five out of the six urns, found with flint implements in a cairn in the Fort of Dunruagh, County Tyrone, have been repaired, and, with the implements, are now exhibited. Mr. Richard Moss, Registrar to the Royal Dublin Society, has presented a stone lamp, on which he has recently published a paper in the Proceedings of the Royal Irish Academy. A finely decorated urn from the Greenhills, County Dublin, purchased from the Longfield Collection, has been repaired, and set up in the case with the cist and other urns from that escar. Additions to the Collection of Stone Celts have been made from two hitherto unrepresented counties, Waterford and Longford; also twelve flint fabricators from County Antrim, the first specimens of the kind in the Collection. The descriptive labels in the torc and bead cases are now almost complete, so is the general labelling in Room III. One new case containing house furniture on one side and a collection of leathern shoes on the other, has been arranged. Some 45 objects in all have been added, exclusive of the valuable collection of Japanese stone implements of the Neolithic and Dolmen Periods, presented by Dr. G. N. Munro, an important accession for comparative archæology.

Mr. Griffith's presentations in 1843-1844 of the stone implements found in the opening of the fords on the Shannon by the Shannon Commissioners, have received a valuable addition this year by Mr. T. P. S. Crosthwaite having presented 83 stone celts, found in the ford of that river at Killaloe Bridge, with a flint arrow-head found near the Tipperary shore, and a bronze ring pin, found at the bridge, on the upstream side. Many of these implements being of the adze type, must have been set

transversely, and were probably used for making dug-out canoes, for which purpose the site was very suitable, as there was no other point at which the river could be waded from Killaloe to Keel, about four miles from Banagher, and great forests covered the mountains on the Clare shore till the middle of the eighteenth century.

A very important Loan Collection must be most briefly noted, that of the Royal Society of Antiquaries of Ireland, recently removed from Kilkenny and arranged in the south-west wing of the Crypt. The results of the excavations in the five Dunbel Rathes, County Kilkenny, near the Kilkenny and Waterford Railway (showing the early origin and long occupation of these earthworks down to at least the fifteenth century), are noteworthy. They include implements of stone and bronze, jet beads, a raised inscription in metal work of the fifteenth century, and other objects.

A new edition of the Catalogue of Irish Coins is about to be issued, and third editions are on the point of being published of the Handbooks to the Irish Ethnographical Collection and to the Antiquities of the Christian Period; these new editions are fully illustrated.

#### ZOOLOGY.

Since the last Report the work of arranging the exhibits in the large lower room devoted to the animals of Ireland has been steadily carried on, and many interesting additions have been made. Among these latter are some beautifully prepared groups of mammals, including badgers and foxes, and also some fine exhibits illustrating the habits of birds. Two large cases containing a striking collection of remains of animals now extinct and obtained from caves and lakes, bogs and other deposits in Ireland, have been arranged effectively near the entrance at the east end of the Main Hall. Here may be seen most interesting examples illustrating the types of mammoth, hyæna, bear, wolf, reindeer, horse, pig, goat and wolf-dog, which in early times inhabited our island. It is to be hoped that the large wall cases along the north side of the hall will soon be prepared for the reception of specimens. The walls and ceiling of this hall are very dirty; the Visitors again urge that they should be painted a light colour. The prismatic glass introduced into all the windows on the south side of the hall has improved the lighting to a considerable extent, but the illumination is still very defective.

The Visitors hope that a really satisfactory plan is in existence for a worthy entrance gate and drive from Merrion Square to the main door of the Natural History Museum, and that it will be carried out at the earliest opportunity. No change has been made in this entrance since the last Report.

Among the recent acquisitions, on view in temporary cases and not yet placed in position, are a beautifully executed

enlarged model of the common house fly, a magnificent example of the skull of the extinct sabre tooth tiger from California, and a number of large moths, including very fine examples of the exquisite ornithoptera. Especially interesting is a model of a rock pool in which are to be seen, most realistically displayed, examples of the more common marine invertebrate animals found round about our coasts. This model has been prepared by the Staff of the Museum and has been much studied and admired by visitors.

Since the last Report a partition has been erected dividing the students' room from the passage, of which it formerly was a part, and a few small tables have been placed at the disposal of those desiring to examine the specimens available for study. The change has been a great success and has resulted in a large increase in the number of students. This is indicated by a book kept for their signatures. It is most gratifying to notice that the specimens to which free access is afforded have been treated carefully by the students.

In spite of the strong protest raised by the Visitors the old Cattle Shed Rooms Annexe I, II., III., IV., and V., are in as bad a condition as ever, and apparently no steps are being taken to rebuild them. The roofs, walls and floors are hideous, and in spite of the repairs mentioned in the letter of 5th December, 1910, the roof remains in such a condition that trays of sawdust are still required in many places to catch the rain which comes through. In the hope that reiteration of their complaint may convince the authorities of the necessity and urgency of a sweeping change, the Visitors again raise a protest against these old sheds, with their dirty, leaky roofs, rough, unplastered walls and uneven flooring, being retained as part of the great National Museum of Ireland. The Visitors urge, once again, that the removal of these disfigurements should not be postponed, but that an extension of the Natural History Section should be undertaken at once.

In their last Report the Visitors drew marked attention to the want of accommodation for the Natural History specimens used for study and research, and not usually exhibited to the public. The importance of these working Collections was pointed out in the Report and also in the letter of the Visitors dated 6th March, 1911, to the Secretary of the Department of Agriculture and Technical Instruction. Since last year an underground store for spirit jars and for specimens preserved in alcohol has been built, but no additional space has been provided for the cases which at present block the landings, the staircases and the workrooms of the Keeper and his assistants. The matter is of pressing need, and the Visitors urge that something may be done to relieve it during this year. They suggest the removal of the old shed to the right of the door, leading from the yard, to the Zoology workrooms, and the erection in its place of a two-storied building with a cellar extension from

the new spirit store. This building could be entered on the upper floor from the stairway near the Keeper's workroom, and would be most conveniently situated for purposes of administration and supervision.

Judging from the letter of the Assistant Secretary, Office of Works, dated December 29th, 1910, the Visitors fear that those responsible for the welfare of the Museum have failed to recognise the importance of these study and research collections, and the urgency in the matter of providing for them safe and proper accommodation.

#### GEOLOGY AND MINERALOGY.

During the past year the work of arranging the Collection of the Geological Survey of Ireland in the curved gallery has been continued. Some additional cases have been provided, and a series of specimens illustrating building stones, and stones used for paving and road metal is in process of arrangement. The large wall cases are well suited for the illustration of the sectional reports of the Survey, and an interesting systematic plan of exhibition has been adopted. No changes have been made in the part of the section devoted to Mineralogy.

The Visitors hope that, as suggested in their last Report, steps will be taken to have the names of the localities engraved on the Irish marbles which adorn the Rotunda and Entrance Hall of the Museum. Very great interest attaches to these beautiful examples, but, except for a few almost illegible names on dirty paper labels, no indications of the districts from which they were obtained are available for the public.

#### BOTANY.

Year by year the inadequacy and unsuitability of the accommodation provided for the display of the Botanical Collections becomes more and more apparent. The specimens are housed high up on the top floor of the part of the building, otherwise devoted to the Art Collections, and far away from all the other Natural History objects. Fine rooms with handsomely carved doors and fireplaces are divided by partitions into ugly and inconvenient workrooms, in a vain attempt to provide accommodation for botanical exhibits.

The extremely useful and instructive teaching series, designed for the use of students, is accommodated in the handsome Entrance Lobby from which the other rooms open. The interesting manner in which the various structural types are arranged and explained deserves the highest praise, and one must regret that the room is so unsuitable for the serious kind of study for which the material is so carefully displayed. An attempt has been made to illustrate some facts in vegetable pathology, and the success that, in spite of very restricted space, has been achieved makes it the more regrettable that opportunities are not provided on a proper scale for the illustra-

tion of the diseases of plant origin which affect the trees, fruit and crops of Ireland. The adequate display of the known facts regarding the vegetable diseases which infect the potato, flax, oats and fruits, etc., grown in this country, and incidentally the scientific explanation of the methods used for their cure and prevention, would, in the opinion of the Visitors, not only be a great attraction, but would undoubtedly prove of service to the agricultural interests of Ireland. In another way the usefulness of the Botanical Section needs development. At present nothing is being done to extend the sub-section devoted to the economic aspect of the Collection. The Visitors would like to see on exhibition fine specimens illustrating the character of the timber which can be grown in Ireland, and scientifically arranged cases illustrating the flora of Ireland, and of other countries, which are of interest economically. The named Collection of willows and the exhibits indicating their economic uses, shows how interesting and useful other groups might be made, if only opportunities for their collection and display were afforded.

There is no doubt that the ideas, energy and enthusiasm necessary to make the Botanical Collections one of the great attractions of the National Museum, are merely held in check by the restricted and unsuitable space and accommodation provided.

The whole question of extension, however, is in abeyance for want of space. The Visitors again desire to press upon the authorities the urgency of providing the necessary accommodation at once by undertaking the building of the new wing proposed for the extension of the Natural History department. By so doing, they will not merely enable the Botanical Collections to be placed in their proper position—i.e., near the zoological and geological exhibits—but they will at the same time provide for an extension of the Art sections by setting free the rooms at present devoted to Botany.

In the meanwhile the heating and ventilation of the rooms are both still defective. The Visitors are of opinion that open fires should not be used, and that the connection with the main heating apparatus should be improved. The windows in some of the rooms might, with great advantage, be made to open, and, as suggested in the last Report, roof-lights might be introduced into Room V. The work-room of the Professor is in the same condition of discomfort as last year. Nothing has been done to improve the artificial lighting of the rooms.

The old-fashioned electric lights are quite useless, and unless it is found possible to replace them by others more powerful, the Visitors feel that little can be gained by opening the Botanical Section after sunset.

The Visitors are glad to note that additional new and very suitable cases are being provided for Room IV. The Visitors hope that further additions will be made to the fine series of microscopic sections of the fossil plants, for which an excellent



means of exhibition has been devised. The stereoscope and the microscope mounted in the large room are much appreciated by students.

## ROYAL BOTANIC GARDENS.

The Visitors inspected the Gardens on the 12th April, 1911. They found them as on former occasions in excellent condition.

The number of visitors to the Gardens during the year ending 31st March, 1911, was 404,152, as against 430,426 for the corresponding period in the preceding twelve months.

Some important improvements have been made during the past year:—On the hillside where so many trees were blown down during the gale of 1903, the substitution of good mould for the poor shallow soil and gravel has been continued, and is now nearly completed.

The rock-garden has been further extended. It is proposed in the next year to increase its dimensions to a considerable extent, and a sum of £50 has been included in the Civil Service Estimates, Class II., for this purpose. When this work is finished, and the rock-garden furnished with plants, it will form one of the most attractive, and interesting features of the Garden.

The Visitors proceeded to inspect the Houses. They found the Fern House No. I. in good condition, but it would be improved by an extension of the case for filmy ferns on the south-west side. The Visitors are glad to find that their recommendation as to the repair of the curvilinear range of houses, Nos. IV. and VI., have been carried out in the most satisfactory manner, and that the structures have been rendered safe and lasting.

The houses generally and the pits in the yard at rear of the range of houses are in good condition, and the Visitors are glad to learn that a continuation of the Vartry water main has been laid into this yard, by which a greatly improved water supply will be afforded. The Visitors, however, note that the flower-pot shed, which is in bad repair, is quite inadequate and unsuitable, and they recommend that it be rebuilt so as to properly protect the pots.

The Orchid House No. 7, has been thoroughly repaired, and is now in good condition. The Visitors suggest the removal of the high shelf round the central pillars of the house which obstructs the light. The construction of a new Orchid House or Houses for small and delicate plants is much required. The existing accommodation in the Orchid House is quite inadequate for the purposes of a collection which is regarded by experts as the best in any public garden in Europe. At Kew there is a separate growing house for each large class of Orchid, whereas at Glasnevin plants requiring diverse treatment and conditions have to be grown in the same house.

The Visitors have more than once commented on the disproportion between the sums voted for the support of the

Glasnevin Botanic Gardens and those expended on similar institutions elsewhere. For example, the Botanic Gardens at Edinburgh receive an amount of public money about three times greater than that expended on the Glasnevin Gardens.

The Visitors regret to learn that their recommendation that the water mains from the storage tank should be extended to the new grounds has not yet been carried out, and they hope that this will be done in the near future.

In their Report last year the Visitors submitted a carefully prepared scheme for the rebuilding on an improved plan of the men's quarters, the refreshment room, the stables, tool-houses, stores and forcing houses. The scheme included the provision of a properly fenced yard for the receipt of goods, and a goods entrance. The Visitors learn with satisfaction that the scheme so submitted met with the approval of the Department, and was adopted by it, and the Visitors now urge the necessity of having the most pressing of these suggestions carried out at once. It is especially important that the rebuilding of the men's quarters should be taken in hands without delay. The Visitors are informed that there is no sick room in the existing structure, and that the sick and healthy occupy the same dormitory. They understand that recently a man suffering from diphtheritic sore throat had to be allowed to remain in the general dormitory, as it was found impossible to find room for him in any of the hospitals.

D. H. MADDEN,  
*President.*

10th May, 1911.

# REPORT

OF THE

## COUNCIL OF TRUSTEES

OF THE

## NATIONAL LIBRARY OF IRELAND

*For the Year 1910-11*

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND

As Chairman of the Council of Trustees, I have the honour to submit the Report for the year ending March 31st, 1911.

The Library was open on 288 days. The attendances of readers numbered 208,501. This total exceeds that of 1909-10 by 19,285, but the working year in 1909-10 was five days shorter than in the year 1910-11. The daily average of attendances during 1910-11 was 724, the highest yet recorded.

Attendances morning (10 to 6), ..	..	151,631
Attendances evening (6 to 10), ..	..	56,870
		<hr/>
		208,501

The number of volumes added to the Library and made accessible to readers has been 5,142. Of these 731 are folio, 576 quarto, and 3,835 octavo and smaller sizes. A table in which these books are classified by their subjects will be found in Appendix I.; and there also will be found statistics as to the book-binding, as to the borrowing by members of the Royal Dublin Society, and by certain officers of the Science and Art Institutions, and, further, lists of donors of books, whether private persons or public bodies.

Proofs of the whole of the Author and Title Catalogue for the year 1908 have been received. The books acquired in the year to which this volume relates were more than usually numerous. The Catalogue for 1909 is now being prepared for Press, and in it are incorporated slips written by Mr. Vine some years ago for works in the Sections Irish History and Irish Topography, previously catalogued unsatisfactorily.

In dealing with the Decennial Subject-index of Works added to the Library during 1894-1903, the printers have moved rather slowly, and the Trustees feel disappointed by the fact that this Index is not already at the service of inquirers. However,

proofs have now been received down to the letter W. It is hoped that the work may be issued at least before the close of the present year. Meanwhile, a Subject-index of publications relating to the Irish Language and Literature has been in course of preparation. Particulars will be found in the Annual Report of the Librarian.

In Appendix I. the Trustees not only record the names of numerous donors, but note a series of the more remarkable gifts. Here, in the Report proper, they desire to mark their sense of the generosity of Lord Crawford in presenting his magnificent *Bibliotheca Lindesiana*, or privately printed Catalogue of the Library at Haigh Hall, and also the *Catalogue of Tudor and Stuart Proclamations*. Further, they would call attention to the list of works presented by Father Coleman, O.P., particularly as it well indicates how by donation the Library is enriched with valuable old books, for the purchase of which its funds might not be sufficient.

In January, 1911, it was notified to the Trustees that the Treasury had acceded to their application, made some time since, recommending the appointment of a typist and stenographer to aid, as Secretary to the Librarian, in correspondence and in the discharge of office work—the engagement to date from the 1st April.

The Trustees regret that the Board of Works has not found it possible to place on the Estimates for the present year important additions to the shelving of the Architecture Room and the Delivery Room, pressed upon the attention of the Board in the past, and now much needed. Upon this subject the Trustees, at their Meeting of January 27th, 1911, forwarded a Resolution.

The Trustees have pleasure in noting that an extension of space for newspaper accommodation has been secured during the year. A distant section of the basement—that part near the East Wing—has been walled off, and provided with a fire-proof iron door. A hitherto inaccessible chamber has been, besides, brought into connection and floored, the electric light has been introduced throughout, and the ventilation improved. Here a large number of the newspapers least in use may be placed, a relief to congestion in the nearer part of the book-store.

By direction of the Trustees the Librarian attended two of the International Congresses held at Brussels in 1910 in connection with the Exhibition there—the *Congrès de Bibliographie et de Documentation* and the *Congrès des Archivistes et des Bibliothécaires*, which occupied the week August 25 to 31.

By direction of the Trustees, the Annual Conference of the Library Association at Exeter, in the week beginning September 5, 1910, was attended by Mr. W. K. Magee, B.A., Second Assistant Librarian.

The Trustees submit the Annual Report of the Librarian, which deals with certain sections of the internal administration of the Library in greater detail.

In this Annual Report, the thirty-fourth since the foundation of the National Library of Ireland, the Trustees desire to express their regret at parting from Mr. H. Bantry White, I.S.O., upon his impending resignation. Mr. White for about thirty years has acted as Keeper of the Minutes and Registrar of the Council of Trustees, and also as Chief Clerk and Executive Officer of the Administration of the Science and Art Institutions. The Trustees would place on record their cordial appreciation of the valuable assistance which they have at all times received from Mr. White, and of the friendly relations which have always existed between him and the Trustees.

T. A. FINLAY,  
*Chairman.*

26th May, 1911.

# APPENDIX I.

## STATISTICS AND LISTS

Subjoined is a statement of the total attendances of readers and the daily average since the Library was founded in 1877 :—

YEAR		ATTEND- ANCE	DAILY AVERAGE
1878	First complete year of Library, .. ..	27,452	99
1889	Latest year in Leinster House, .. ..	51,325	174
1893	First reliable record after transfer, 1890, to present building, .. ..	113,888	388
1894,	.. ..	119,500	404
1895,	.. ..	125,500	427
1896,	.. ..	136,365	462
1897,	.. ..	137,832	470
1898,	.. ..	142,218	486
1899,	.. ..	154,878	529
1900,	.. ..	148,405	506
1901 (January—March),	.. ..	40,763	536
1901-1902,	.. ..	150,780	518
1902-1903,	.. ..	174,786	588
1903-1904,	.. ..	181,385	619
1904-1905,	.. ..	198,274	677
1905-1906,	.. ..	193,462	658
1906-1907,	.. ..	178,974	619
1907-1908,	.. ..	190,657	646
1908-1909,	.. ..	188,596	673
1909-1910,	.. ..	189,266	668
1910-1911,	.. ..	208,501	724

### ANNUAL STATISTICS OF BOOKS "CATALOGUED AND MADE ACCESSIBLE TO READERS" SINCE JANUARY, 1895

YEAR	VOLUMES
1895,	2,451
1896,	2,363
1897,	2,802
1898,	2,775
1899,	3,360
1900,	3,185
1901 (January—March),	826
1901-2,	3,620
1902-3,	3,635
1903-4,	4,209
1904-5,	6,365
1905-6,	5,563
1906-7,	3,946
1907-8,	4,817
1908-9,	4,408
1909-10,	5,970
1910-11,	5,142

The volumes added to the Library and made accessible to readers during the year 1910-11, may be grouped as follows :—

Bibliography, Library Economy, Book Rarities, and Cyclopædic works,	129
Newspapers, General Periodicals, .. ..	311
Philosophy, .. ..	97
Religion, Theology, Ecclesiastical History,	322
Sociology, Statistics, Political Science, .. ..	78
Political Economy, .. ..	137

Law, .. .. .	110
Parliamentary Papers, .. .. .	176
Administration, .. .. .	332
Associations, .. .. .	57
Education, .. .. .	117
Commerce, .. .. .	15
Amusements, Customs and Manners, .. .. .	73
Philology, .. .. .	142
General Science, .. .. .	68
Mathematics, .. .. .	46
Astronomy, .. .. .	45
Physics, Light, Heat, Electricity, .. .. .	54
Chemistry, .. .. .	54
Geology, .. .. .	358
Paleontology, .. .. .	14
Biology, Anthropology, &c., .. .. .	57
Botany, .. .. .	67
Zoology, .. .. .	304
Useful Arts in General, .. .. .	72
Patent Office Publications, .. .. .	114
Medicine, .. .. .	116
Engineering, .. .. .	73
Agriculture, .. .. .	123
Domestic Economy, .. .. .	17
Communication, Commerce, Railway Guides, &c., .. .. .	48
Chemical Arts, Manufactures, and Trades, .. .. .	30
Fine Arts in General, .. .. .	37
Landscape Gardening, .. .. .	4
Architecture, .. .. .	32
Sculpture, .. .. .	37
Drawing and Design, .. .. .	12
Painting, .. .. .	22
Engraving, .. .. .	8
Photography, .. .. .	30
Music, .. .. .	39
Archæology, .. .. .	59
General Literature, .. .. .	24
English Literature (Essays, Poetry, Periodicals, &c.), .. .. .	218
German, .. .. .	73
French, .. .. .	150
Italian, .. .. .	46
Spanish, .. .. .	15
Latin, .. .. .	23
Greek, .. .. .	23
Irish, .. .. .	21
Other Literatures, .. .. .	28
General History, .. .. .	55
Geography and Travel, .. .. .	66
Biography, Genealogy, Heraldry, &c., .. .. .	161
Ancient History, .. .. .	15
History of Europe, .. .. .	123
" " Asia, .. .. .	21
" " Africa, .. .. .	1
" " America, .. .. .	40
" " Oceanica, .. .. .	3
Total, .. .. .	5,142

Subjoined is the return as to binding done for the Library during 1910:—

In the binder's hands, Dec. 31st, 1909, ..	840 vols.
Sent to the binder during 1910 ..	4,500 ..
	<hr/> 5,340 ..
Returned by binder during 1910, ..	4,380 ..
	<hr/> 960 ..
In the binder's hands, Dec. 31st, 1910, ..	

Subjoined is the account of books borrowed from the Library during twelve months ending March 31, 1911, by members of the Royal Dublin Society, and by certain officers of the Institutions of Science and Art:—

In borrowers' hands, March 31st, 1910, ..	122
Lent between April 1, 1910, and March 31, 1911, to members of the Royal Dublin Society, ..	718
Lent to officers of the Institutions of Science and Art, ..	505
	<hr/> 1,345
Returned during the twelve months, ..	1,253
	<hr/> 92
In borrowers' hands, March 31st, 1910, ..	92
With members of the Royal Dublin Society, ..	47
With officers of the Institutions of Science and Art, ..	45
	<hr/> 92

The number of members of the Royal Dublin Society entitled to borrow, according to the last official list published by the Society, is 309.

The following are some of the more noteworthy special gifts received during the year:—

**MISS D. E. ROBINSON**, Riverdale, Terenure.—*The Spectator*, 1895-1903.

**THE REV. CHARLES PLUMMER**.—*Vitas Sanctorum Hiberniae*, 2 vols., Oxford, 1910.

**THE CORPORATION OF MANCHESTER**, through Alderman Plummer.—*Manchester Court Leet Records*, 12 vols.; *Manchester Constable's Accounts*, 1612-1776, 3 vols.; 1552-1846; and other works relating to the Municipal History of Manchester.

**MR. J. J. FULLER**, F.S.A.—*Bernard's Life and Death of Usher*, 1656.

**THE COUNCIL OF WESLEY COLLEGE**.—A further donation of nineteen oriental works, including: *The Dabistân, or School of Manners*, transl. by D. Shea and A. Troyer, 3 vols., 1843; *Life of Sheikh Mohammed Ali Hazin*, written by himself, ed. F. C. Belfour, 1831; *Le Livre des Récompenses et des Peines*, en Chinois et en Français, trad. S. Julien, 1835; Mirkhond: *History of the early Kings of Persia*, transl. D. Shea, 1832; Meer Hussein Ali Khan Kirmani: *History of Hydur Naik*, transl. by Col. W. Miles, 1842; *Alfiyya, ou la quintessence de la grammaire Arabe*, publ. Silvestre de Sacy, 1833; Chodzko's *Specimens of the Popular Poetry of Persia* 1842; *Hoei-lan-ki*, ou l'histoire du cercle de craie: Drame, trad. du chinois par Stanislas Julien, 1832; Firdausi's *Shâh Nâmeh* transl. James Atkinson, 1832.

**MR. J. PERRY RINGWOOD**, Foxrock.—Whitelaw, Warburton & Welsh, *History of Dublin*, 2 vols. 1818; *Bilse's Life in a Garrison Town*, 1904; *Dear Fatherland*, 1904; Beyerlein's '*Jena or Sedan*,' 1904.



**THE UNIVERSITY OF ST. ANDREWS.**—Lindsay's *Early Irish Minuscule Script*, 1910; Nonius Marcellus, 1901; *Ancient editions of Martial*, 1903; *Ancient editions of Plautus*, 1904; *Syntax of Plautus*, 1907; *Contractions in Early Latin minuscule MSS.*, 1908 (University Publications, I.-VI.).

**MR. THOMAS O'CONNOR**, Smethwick, Birmingham.—Upwards of sixty volumes relating principally to the history of Dublin, including Hali-day's *Scandinavian Kingdom of Dublin*, 1882; Levey's *Annals of the Theatre Royal*, 1880; Harrison's *Memorable Dublin Houses*, 1890; *Dublin Irish Builder*, 1866-68; Zozimus, 1870-72; Dutton's *Justice of the Peace for Ireland*, 1718; Watson's *Almanac and Directory*, 1763, 1799, 1800; Watson & Wilson's *Almanac, Registry, and Directory*, odd volumes between 1800-1835, etc.

**MR. R. G. J. PHELPS.**—*The Statistical Atlas of England, Scotland, and Ireland*, 15 parts.

**THE REV. A. COLEMAN, O.P.**—Cicero: *De Officiis*, Venice, 1563, *Orations*, transl. J. Rutherford, 1799; Pliny: *De Historia Mundi*, Paris, 1543; Virgil: *Opera*, ed. Heyne, 1793; Hugo: *Sacrorum Bibliorum Vulgatae editionis Concordantia*, 1685; *Missale sacri ordinis Prædicatorum*, 1796; Blair's *Chronology and History of the World*, 1768; St. Augustine's *City of God*, 1610; Sforza Pallavicino: *Historia del Concilio di Trento*, 1606; Bentivoglio: *Della guerra di Fiandra*, 2 vols., Venice, 1645; Usaber's *Annales Veteris et Novi Testamenti*, Geneva, 1722; Petrus Annato: *Methodicus ad Positivam Theologiam Apparatus*, 1701; Battista Platina: *Historia delle vite dei sommi pontefici dal Salvatore Nostro*, Venice, 1594; *Libro del Reyno de Dios*, Barcelona, 1605; Durandus: *Rationale Divinarum Officiorum*, Lugduni, 1559; Stephanus: *Thesaurus Linguae Latinae*, Tom. I., 1734, etc.; also devotional works, breviaries, and volumes of church music.

**THE EARL OF CRAWFORD, K.T.**—*Bibliotheca Lindesiana*; *Catalogue of the printed books preserved at Haigh Hall, Wigan*, 4 vols., 1910; *Catalogue of Tudor and Stuart Proclamations 1485-1714*, 2 vols., 1910.

**MR. W. P. COURTNEY.**—Dodsley's *Collection of Poetry* (one of 75 copies reprinted for private circulation), 1910.

**H. WILLIAMS, M.V.O., I.S.O.**—*The Dublin Evening Post*, 1802.

**MR. J. B. S. MACILWAINE, R.H.A.**—A number of *Catalogues of Dublin and other Art Exhibitions*, 1878-1903.

**MR. FRANCIS JOSEPH BIGGER.**—*Scrap-book of Newspaper Cuttings*, 1800-05, made by Dr. Trevor, the jailer at Kilmainham, in 1803.

**MR. E. STANLEY ROBERTSON.**—Upward of 60 volumes on general literature, among them Demosthenes, ed. Morel, Paris, 1570; Cicero, *Opera*, ed. Schrevelius, Amsterdam, Elzevir, 1661; Maine's *Hindu Law and Usage*, 1878; Maine's *Ancient Law*, 1861, *Village Communities*, 1872; Dumont's *Traité de législation civile et pénale*, 2 vols., 1830; Potter's *Archæologia Græca*, 2 vols., 1813; Webb's *Intellectualism of Locke*, 1857; Richardson's *Arabic, Persian, and English Dictionary*, 1828; Hippocrates' *Aphorismi*, 1633; also a number of useful volumes on Indian Law.

**AN ANONYMOUS DONOR.**—*The Naturalist's Journal* [(Nature Study), 10 vols., 1896-1906; *American Monthly Microscopical Journal*, vol. 21-22, 1900-01, etc.

A list is subjoined of the names of persons from whom gifts have been received between April 1, 1910, and March 31, 1911 :—

Axon, W. E. A., LL.D.	Lowry, F. M.
Bacon, Mrs. G. D., New York.	Lyster, A. E.
Baer, Joseph, & Co.	Lyster, T. W.
Bailey, Sir W. H.	Macartney-Filgate, W. T.
Ballinger, John, M.A.	MacIlwaine, J. B. S., R.H.A.
<i>Ballymena Observer</i> , Editor of.	MacRitchie, David.
Benson, Mrs. A. H.	MacSorley, Miss.
Bernard, Very Rev. Dean.	Makower, Felix.
Berry, H. F., Litt.D.	Marstrander, Prof. Carl.
Best, R. I.	Maxwell, Miss C.
Bigger, F. J.	Mewburn, Ellis & Pryor, London.
Blair, Miss E. executrix of late J. E. Gore.	Millin, J. Shannon.
Boyd, Rev. S. T.	Montgomery, Miss.
Booth, Bramwell.	Neil, J. C.
Brabazon, James.	<i>Newtownards Chronicle</i> , Editor of.
Carpenter, G. H., D.Sc.	O'Connor, Thomas, Birmingham.
Carson & Comerford, Ltd.	Oldham, Prof. C. H.
Chambers, R. W.	Orpen, Goddard H.
Coffey, George.	Plummer, Rev. Charles.
Cole, Prof. Grenville A. J.	Plummer, Alderman, Manchester.
Cole, George W., Conn., U.S.A.	Praeger, R. Lloyd.
Coleman, Rev. A., O.P.	Purser, Miss Sarah H., R.H.A.
Courtney, W. P.	Purser, W. E.
Crawford, Earl of, K.T.	Quin, Lt.-Col. G.
De Burgh, Alfred C.	Read, Sir Andrew.
Denny, Rev. H. L.L.	Reeves, P. Oswald.
Dix, E. R. McC.	Richard, Adhemar, Geneva.
Dunlop, G. A.	Ringwood, J. Perry.
Edge, J. H., K.C.	Robinson, Miss D. E.
Esposito, Mario.	Robinson, E. Stanley.
Fairbrother, Miss E. H.	Ross of Bladensburg, Sir John.
Flood, W. H. G., Mus.D.	Rudmose-Brown, Prof. T. D.
Fogerty, G. J., R.N.	Russell, Father Matthew, S.J.
Fordham, Sir Herbert G.	Salazar, Count Lorenzo.
Freyer, Dermot.	Samuels, A. P.
Fryer, A.C.	Saville, Marshall H., New York.
Fuller, J. J., F.S.A.	Scharff, R. F., Ph.D.
Fussell, J. H.	Shirley, John, B.Sc.
Glynn, Joseph A.	Sirr, Harry.
Green, Mrs. J. R.	Smith, Walter G., M.D.
Groves, Tennyson.	Solomons, M. E.
Gutekunst, R.	Steenstrup, Dr. K. J. V.
Haslam, Mrs.	Storey, J. B., M.B.
Hart, Lt.-Gen. Sir Reginald.	Strauss, Joseph, Ph.D.
Hulme, E. W.	Tempest, Harry G.
Irwin, Sir Alfred, C.S.I.	Theosophical Book Co.
Janet, Charles.	Thompson & Co., W. P.
Johnson, Prof. T.	Ward, Rev. J. H.
Johnston, James N., New York.	Welch, R.
Kelly, Miss M. T.	Westropp, Thomas J.
Kelly, Richard J., B.L.	White, H. Bantry, L.S.O.
Lefuel, Madame, Paris.	White, Rev. J. D., Newport, D.D.
Legge, Capt. R. F.	Williams, Alex., R.H.A.
Lennox, P. J.	Yeats, Miss, Dundrum.

Gifts have been received between April 1, 1910, and March 31, 1911, from the following Public Departments, Public Bodies, Public Institutions, and Learned or Literary Societies :—

Municipal Council of the City of Dublin.  
 Port and Docks Board, Dublin.  
 Belfast Harbour Commissioners.  
 His Majesty's Stationery Office.  
 Lords Commissioners of H.M. Treasury.  
 Lords Commissioners, Admiralty.  
 British Museum.  
 Board of Trade.  
 Patent Office.  
 Foreign Office.  
 War Office.  
 Office of the Registrar-General of Scotland.  
 Astronomer Royal, Greenwich.  
 " " " Scotland.  
 Ordnance Survey of England and Wales.  
 " " " Ireland.  
 Geological Survey of Great Britain.  
 " " " Ireland.  
 " " " Scotland.  
 " " " Canada.  
 " " " India.  
 " " " United States of America.  
 " " " The Transvaal.  
 Transvaal Mines Department, Pretoria.  
 India Office, Whitehall.  
 Archaeological Survey of India Department, Calcutta.  
 Botanical Survey of India.  
 Government of Bombay.  
 Department of Agriculture, India.  
 United Provinces Government, Allahabad.  
 Superintendent of Government Printing, India.  
 Meteorological Office, India.  
 Government of Canada.  
 Ministry of Interior, Canada.  
 Survey Department, Giza, Egypt.  
 Italian Government.  
 Department of Mines, Ottawa.  
 Government of Cape of Good Hope.  
 Department of the Interior, U.S.A.  
 Department of Agriculture, U.S.A.  
 Department of Agriculture, Ottawa.  
 Bureau of Labor, Washington.  
 Representative, Commonwealth of Australia, London.  
 Commissioners of Education, Washington.  
 Department of Commerce and Labor, U.S.A.  
 Tenement House Department, N.Y.  
 Comissão de Expansão Economica de Brazil.  
 Smithsonian Institution.  
 Bureau of Statistics, Treasury Department, U.S.A.  
 Coast and Geodetic Survey, U.S.A.  
 Ministerio de Fomento, Cuerpo de Ingenieros de Minas del Peru.  
 Argentine Republic, Public Library Commission.  
 Minister of Education, Ontario.  
 Legislative Assembly, Melbourne.  
 Department of Agriculture and Technical Instruction for Ireland.  
 Congested Districts Board.

Board of Education, South Kensington.  
 Board of Intermediate Education, Ireland.  
 Office of Records of Scotland.  
 Corporation of London.  
 Corporation of Manchester.  
 Royal Society, London.  
 Australasian Association for the Advancement of Science.  
 London County Council.  
 London School Board.  
 Pharmaceutical Society of Great Britain.  
 Pharmaceutical Society of Ireland.  
 Royal Geographical Society.  
 Botanic Gardens, Kew.  
 Musée Océanographique, Monaco.  
 First Church of Christ Scientist, Dublin.  
 Dublin Sanitary Association.  
 General Medical Council, London.  
 City of Dublin Public Health Office.  
 Royal Astronomical Society, London.  
 Royal Institute of British Architects, London.  
 Society of Accountants and Auditors, London.  
 Chemical Society, London.  
 Society of Arts, London.  
 Australian Museum, Sydney.  
 Pogroms Commission.  
 Free Trade Union.  
 Tariff Reform League.  
 Imperial Federation League, Melbourne.  
 Research Defence Society, London.  
 Hungarian Ornithological Society, Budapest.  
 Boston Museum of Fine Arts.  
 Boston Museum and Art Gallery.  
 National Museum of Wales.  
 Belfast Naturalists' Field Club.  
 Belfast Natural History and Philosophical Society.  
 Irish Agricultural Organization Association.  
 Royal College of Science, Dublin.  
 Royal Botanic Gardens, Glasnevin.  
 Dublin Fire Brigade, per T. P. Purcell.  
 Irish Unionist Alliance.  
 Irish Central Bureau for the Employment of Women.  
 City of Dublin Technical Schools.  
 Municipal Technical Institute, Belfast.  
 Theosophical Society, London.  
 Methodist Missionary Society, London.  
 Royal Zoological Society, Ireland.  
 Incorporated Law Society, Ireland.  
 Royal Declaration Amendment Committee.  
 Navy League.  
 Statistical and Social Inquiry Society of Ireland.  
 Belfast Municipal Art Gallery and Museum.  
 Battersea Public Libraries.  
 Boston Public Library.  
 St. Helen's Public Library.  
 Imperial Library, Calcutta.  
 Bodleian Library, Oxford.  
 Cambridge University Library.  
 Library of Congress, U.S.A.  
 New York State Library.  
 Harvard University Library.  
 Cornell University Library.

St. Andrews University Library.  
 Bibliotheca Publica Provincial de La Plata.  
 Library Co. of Philadelphia.  
 John Rylands Library, Manchester.  
 Milwaukee Public Library.  
 Melbourne Public Library.  
 Newcastle-on-Tyne Central Library.  
 New South Wales Public Library.  
 Lowell City Library, U.S.A.  
 Toronto Public Library.  
 Los Angeles Public Library.  
 Carnegie Free Library, Cork.  
 Bibliotheca Nacional, Habana.  
 Workington Borough Library.  
 Wigan Public Library.  
 Girton College, Cambridge.  
 Newnham College, Cambridge.  
 Alexandra College, Dublin.  
 Royal Holloway College.  
 Clongowes Wood College.  
 Maynooth College, League of St. Columba.  
 Wesley College, Council of.  
 Trinity College, Dublin: The Board.  
 National University of Ireland.  
 Royal College of Physicians, Ireland.  
 Aberdeen University.  
 Queen's University of Belfast.  
 University College, Cork.  
 University College, Galway.  
 University of Wales.  
 University of Sheffield.  
 University of Leeds.  
 University of Liverpool.  
 University of Manchester.  
 University of Birmingham.  
 University of Cambridge.  
 Edinburgh University.  
 Glasgow University.  
 Harvard University.  
 University of London.  
 University College, London.  
 Association of American Universities.  
 New York University.  
 Yale University.  
 Princeton University.  
 Cornell University.  
 University of Illinois.  
 Carnegie Foundation for the Advancement of Teaching.  
 College of Preceptors, London.  
 St. Andrews University.  
 Melbourne University.  
 Dartmouth College, N.H.  
 Sydney University.  
 Johns Hopkins University.  
 Chicago University.  
 Catholic University, Washington.  
 Imperial University, Kyoto, Japan.  
 " " College of Science and Engineering.  
 Université Egyptienne.

The following societies present publications annually :—

- The Royal Society of Edinburgh : *Transactions and Proceedings*.  
 The Royal Society : *Proceedings*.  
 The Royal Dublin Society : *Proceedings and Scientific Proceedings and Transactions*.  
 The Royal Irish Academy : *Proceedings, Transactions and Todd Lectures*.  
 Royal Society of Antiquaries, Ireland : *Journal*.  
 The County Kildare Archaeological Society : *Journal*.  
 Belfast Naturalists' Field Club : *Report and Proceedings*.  
 Royal Institute of British Architects : *Journal and Calendar*.  
 Society of Chemical Industry : *Journal*.  
 Sanitary Institute : *Journal*.  
 Society for the Preservation of the Irish Language : *Report*.  
 Royal Academy of Medicine in Ireland : *Transactions*.  
 Institute of Bankers in Ireland : *Journal*.  
 Limerick Field Club : *Journal*.

The following periodical publications have been presented in the year 1910 to the National Library of Ireland, either by the publishers, or by private donors, or by public bodies :—

- Alliance News*.  
*Board of Trade Journal*.  
*Board of Trade Labour Gazette*.  
*Board of Agriculture Journal*.  
*British Medical Journal*.  
*Bulletin, Department of Labor, U.S.A.*  
*Christian Science Journal*.  
*Civil Service Competitor*.  
*Civil Service Weekly*.  
*Cyclists' Touring Club Gazette*.  
*Department of Agriculture and Technical Instruction for Ireland "Journal."*  
*Drapers' Record*.  
*Father Mathew Record*.  
*Free Russia*.  
*Gentlewoman*.  
*International Theosophist* (formerly *The Irish Theosophist*).  
*Irish Cyclist*.  
*Irish Draper*.  
*Irish Field*.  
*Irish Homestead*.  
*Irish Ironmonger*.  
*Irishleabhar Muighe Nuadhad*.  
*Irish Rosary*.  
*Irish Packet*.  
*Irish Tobacco Trade Journal*.  
*Irish Vintner and Grocer*.  
*Kew Bulletin*.  
*Musical Herald*.  
*Nation in Arms*.  
*New Century Path*.  
*New Church Magazine*.  
*Propriété Industrielle*.  
*Socialist, The*.  
*T.C.D.*

The following Irish Newspapers, presented during the year 1910, are filed for reference when bound :—

<i>Anglo-Celt</i> (Cavan).	<i>Kerry Evening Post.</i>
<i>Armagh Guardian.</i>	<i>Kildare Observer</i> (Naas).
<i>Ballymena Weekly Telegraph.</i>	<i>Kilkenny Journal.</i>
<i>Ballymoney Free Press.</i>	<i>Kilkenny Moderator.</i>
<i>Banbridge Chronicle.</i>	<i>Larne Times.</i>
<i>Belfast News-Letter.</i>	<i>Leinster Express</i> (Maryborough).
<i>Bray and South Dublin Herald.</i>	<i>Leinster Leader</i> (Naas).
<i>Carrickfergus Advertiser.</i>	<i>Limerick Chronicle.</i>
<i>Clare Journal</i> (Ennis).	<i>Limerick Leader.</i>
<i>Coleraine Chronicle.</i>	<i>Lisburn Herald.</i>
<i>Cork Free Press.</i>	<i>Lurgan Mail.</i>
<i>Cork Constitution.</i>	<i>Meath Chronicle</i> (Kells).
<i>Cork Examiner.</i>	<i>Mid-Ulster Mail</i> (Cookstown).
<i>Cork County Eagle</i> (Skibbereen).	<i>Nationalist, The</i> (Carlow).
<i>Derry Standard.</i>	<i>Nationalist, The</i> (Clonmel).
<i>Donegal Vindicator</i> (Ballyshannon).	<i>New Ross Standard.</i>
<i>Dublin Saturday Post.</i>	<i>Northern Constitution</i> (Coleraine).
<i>Dundalk Democrat.</i>	<i>Northern Whig</i> (Belfast).
<i>Dungannon News.</i>	<i>Portadown News.</i>
<i>East Galway Democrat.</i>	<i>Roscommon Messenger.</i>
<i>Echo, The</i> (Enniscorthy).	<i>Saturday Record</i> (Ennis).
<i>Enniscorthy Guardian</i>	<i>Sinn Féin.</i>
<i>Evening Herald</i> (Dublin).	<i>Sligo Champion.</i>
<i>Evening Telegraph</i> (Dublin).	<i>Sligo Independent.</i>
<i>Freeman's Journal.</i>	<i>Sport</i> (Dublin).
<i>Galway Express.</i>	<i>Sunday Independent</i> (Dublin).
<i>General Advertiser</i> (Dublin).	<i>Tuam Herald.</i>
<i>Ireland's Own</i> (Dublin).	<i>Tyrone Constitution</i> (Omagh).
<i>Irish Catholic</i> (Dublin).	<i>Waterford Chronicle.</i>
<i>Irish Daily Independent</i> (Dublin).	<i>Weekly Freeman and Supplement.</i>
<i>Irish Emerald</i> (Dublin).	<i>Weekly Irish Times.</i>
<i>Irish Nation.</i>	<i>Western News</i> (Ballinasloe).
<i>Irish News</i> (Belfast).	<i>Westmeath Examiner</i> (Mullingar).
<i>Irish People.</i>	<i>Wexford People.</i>
<i>Irish Post</i> (Cavan).	<i>Wicklow News-Letter.</i>
<i>Irish Weekly Independent.</i>	<i>Wicklow People.</i>
<i>Irish Weekly</i> (Belfast).	<i>Witness, The</i> (Belfast).
<i>Irish Weekly Mail.</i>	

The Royal Dublin Society has continued its generous gift of daily and weekly papers as follows :—

<i>Belfast News-Letter.</i>	<i>Illustration</i> (Paris).
<i>Cork Constitution.</i>	<i>Illustrirte Zeitung.</i>
<i>Daily Express</i> (Dublin).	<i>Journal de Débats</i> (Paris).
<i>Evening Mail.</i>	<i>Lady's Pictorial.</i>
<i>Evening Herald.</i>	<i>Morning Post.</i>
<i>Evening Telegraph.</i>	<i>New York Tribune.</i>
<i>Daily Graphic.</i>	<i>Leslie's Weekly</i> (New York).
<i>Daily Mail.</i>	<i>Pall Mall Gazette.</i>
<i>Daily News.</i>	<i>Queen.</i>
<i>Daily Chronicle.</i>	<i>Evening Standard.</i>
<i>Daily Telegraph.</i>	<i>St. James's Gazette.</i>
<i>Freeman's Journal.</i>	<i>Sketch.</i>
<i>Financial News.</i>	<i>Sphere.</i>
<i>Figaro</i> (Paris).	<i>Standard.</i>
<i>Globe.</i>	<i>Tatler.</i>
<i>Graphic.</i>	<i>Times.</i>
<i>Scotsman.</i>	<i>Truth.</i>
<i>Illustrated London News.</i>	<i>Westminster Gazette.</i>
<i>Irish Daily Independent.</i>	<i>World.</i>
<i>Irish Times.</i>	
<i>Illustrated Sporting and Dramatic News.</i>	

## APPENDIX II.

## TWELFTH-REPORT OF THE LIBRARIAN, 1910-1911

## New Series

## To the Council of Trustees

In this, the Twelfth Report of the new series ordered in January, 1900, the Librarian finds it unnecessary to enter into detail as much as usual, because the activities of the year have been chiefly a steady persistence in tasks described in former years and not yet quite completed.

*Book Arrangement*

We have exercised the usual care in checking the correctness of book arrangement. Particular trouble was taken with certain sections. Thus those great volumes from all parts of the Library, placed by the Trustees in special cabinets in the years 1904 and 1905, having increased in number, their arrangement was re-examined and improved, and they were provided with additional labelling. The English monthly and quarterly periodicals also by growth had overflowed into some disorder, and they have been re-arranged, some improvements in classification being incidental; and this is moreover true of the bound volumes of large quarto weekly periodicals, which are much used, and get hard to manage if disorder intrudes. Many other sections have been subjected to careful revision, including a portion of the Joly Collection.

*Maps*

During the year further advance has been made with the Longfield Collection of Maps. This is a series of some thousands of maps of Irish estates, mostly of eighteenth and nineteenth century date, and the great variety in their shape and size renders them difficult to deal with. The sheets have now been provisionally grouped according to the counties of Ireland. This implied much inquiry in many cases where only obscure local names are inscribed by the surveyors. The next step will be to bind them, after which they will be catalogued.

The large General Collection of loose maps has now finally been put into order, and it is hoped that they will all be bound in a few months.

One of the most valuable acquisitions of the year has been the magnificent set of maps issued with the Report of the London Traffic Commission, which have been bound in four large volumes.

The preparation of a class-list of the fine Collection of Irish Maps has already begun.

*Cataloguers' Work*

All the new books added by purchase have had catalogue slips written for them, and a large number have been selected from various donations. Especially worthy of mention among the latter are perhaps the Oriental works presented by Wesley College, Dublin, the philological monographs from the University of St. Andrews, the devotional, theological, classical and historical books presented by Father Coleman, and the gift of Mr. Stanley Robertson, miscellaneous in character, of varied interest, and including a number of treatises on Indian Law.

A large number of the publications of the various State Departments of the United States, which had been presented to the Library by the U.S.A. Government, have been catalogued, arranged and classified as separate monographs. Many enrich the section Agriculture, dealing chiefly with particular points, such as milk-supply, animal and plant diseases, economic entomology, forestry, soils; others deal with education, meteorology, the sciences.



*Printing of Catalogue*

The Catalogue of "Books Added during 1908" has been printed and is coming to us in page revise, and will be issued before long. Most of the copy of the Catalogue for 1909 has been prepared for Press.

[The revision of the slips written for the Joly Collection (excluding the pamphlets and the music) has been completed, and the final preparation of the Catalogue for the Press will be begun when the more important pamphlets have been catalogued, and the slips for these incorporated with the general Catalogue of the Collection.

*Sheet-Music of Joly Collection*

In the Report for 1907-8 reference was made to the cataloguing of this music. During the past year much work has been done in arranging the music of Irish interest. This is extremely voluminous, and consists either of Irish folk-music, or of music by known Irish composers, or of music printed in Ireland. Song-music and dance-music have been separated from the mass, and from each other, and are being arranged under composers where possible. This work has already been useful to enquirers.

*Desk Author-Catalogue*

During the progress of the task of inserting in the Desk Catalogue the latest printed entries, there has been much rectification of that confusion in alphabetical arrangement which is due to overcrowding, to which this work is peculiarly liable. Mention of many minor corrections is omitted, but the entries "Dictionary," "Diderot," "Fielding," "Holmes," "Horace," "Montaigne," "Schiller," and all names which find a place alphabetically in their neighbourhood have been taken up, carefully put in order, and laid down again, clean cuttings being sought out when necessary, and substituted for worn or soiled ones.

*Subject-Index*

Attention was drawn in the last Report to the compilation in large ledgers of a Desk Index of subject references to works added to the Library between 1874-1893. This work has steadily advanced and has now reached the entry SWEDEN.

The Decennial Subject-Index of works added to the Library during the years 1894-1903 at length, I am glad to report, has been set up in type and read through in galley proofs. The work of paging and revise is in progress. This useful index will be issued during the course of the current year, and placed at the service of the public. A set of proof-sheets has been of assistance to the staff in endeavouring to meet the demands of readers. It is intended that the entries in the new volume, which will extend to more than 320 pages, shall be incorporated in the large Desk Subject-Index, thus providing in one alphabet full reference by subject to the numerous books added to the Library between 1874 and 1903. Meanwhile another volume relating to the accessions of 1904-1910 is being prepared.

*Parliamentary Publications*

A continuation has been made of the task described in last year's Report. Special copies of Departmental works upon important subjects, Commissions, and the like, have been presented, and when bound and placed among other monographs in the sections to which they refer have been found very useful in satisfying enquirers, especially since their mere presence among kindred works suggests their use.

*Class-List of Irish Language and Literature*

In addition to the Subject-Index of General Literature, is being prepared a special Class List of works relating to the Irish language and literature. These publications, for the most part scattered through foreign periodicals and learned reviews, are difficult to lay hands upon without some clue such as this Bibliography will provide. The desire for a guide has been expressed by students, and we have had occasion almost daily to observe the utility of the cards placed in the Reading Room for consultation, which formed the basis of our List. This card index, having been transcribed on slips, is being amplified, with bibliographical detail, and prepared for press. A classified arrangement has been adopted, and an Index of authors and editors will be appended.

*Books of Reference in the Reading Room*

A census of the books of reference placed in the Reading Room, and consulted without hindrance by readers, was made on April 5, 1911. It was found that the 35 book-cases on the walls contained 2,895 volumes, that the bound volumes of maps numbered 146, Parliamentary Indexes 20, and Reference Books on the Library Counter 30, making a total of 3,091 volumes. The general works consist mainly of Dictionaries, Encyclopedias, Irish State Papers, General Histories, Calendars and Directories. They are in constant use, and their being thus directly available for quick reference by readers is a great advantage.

*Electric Lighting in the Book-Store*

It is worth while to record the introduction of Osram lamps by the Board of Works in some of the darker sections of the Book-Store. The difficulty on dark autumn and winter evenings, when the attendance of readers is greatest, of finding books speedily, has been thus much lessened. It is hoped that the extension of the use of these lamps to other parts of the Book-Store may be possible.

T. W. LYSTON

June 30, 1911

AGRICULTURAL EDUCATION AND RESEARCH. Report on the Distribution of Grants, 1910-11. [Cd. 6025.] .. .. .	3d.
SPAIN. NEW CUSTOMS TARIFF, 1912. [Cd. 6040.] .. .. .	41d.
CO-OPERATIVE SOCIETIES, INDUSTRIAL AND AGRICULTURAL, UNITED KINGDOM. Report, with Statistical Tables. [Cd. 6045.] .. .. .	1s. 8d.
STANDARD TIME RATES OF WAGES, UNITED KINGDOM. 1 January, 1912. [Cd. 6054.] .. .. .	6d.
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ARMY ENTRANCE REGULATIONS :—	
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" 3. Territorial Force. 1911 .. .. .	6d.
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DEPARTMENT OF AGRICULTURE  
AND TECHNICAL INSTRUCTION FOR IRELAND.

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ELEVENTH  
ANNUAL GENERAL REPORT  
OF THE DEPARTMENT,  
1910-11.

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Presented to both Houses of Parliament by Command of His Majesty.

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